



"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board of NEW ORLEANS

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January 24, 2023

Addendum No. 4

Your reference is directed to **Contract 1415 – CARROLLTON WATER PURIFICATION PLANT WEST POWER COMPLEX FOUNDATIONS AND UNDERGROUND UTILITIES** for the Sewerage and Water Board of New Orleans which is scheduled to open at **11:30 a.m. Local time on February 8, 2023.**

This Addendum consists of 2 Page(s) and 3 Attachment(s).

This addendum provides for the following:

A4.1. Volume 2, Part 1, Technical Specifications, Section 01 31 13, Project Coordination, Paragraph 1.05.A:

DELETE Paragraph 1.05.A and REPLACE with the following:

A. The 1415 Progress Schedule prepared by the Contractor should include the following Construction Milestones, which may affect the Sequence of Work:

1. May 1, 2023 – Anticipated date to issue Notice to Proceed for C1415.
2. June 30, 2023 – C1418 Contractor is substantially clear from the C-7 basin.
3. October 17, 2023 – SFC-1 Foundation complete to accommodate delivery and installation of SFC-1 PDC and SFC-1 transformers by others.
4. October 25, 2023 – SFC-2 Foundation complete to accommodate delivery and installation of SFC-2 PDC and SFC-2 transformers by others.
5. December 15, 2023 – CTG7 Foundation complete to accommodate delivery and installation of CTG7 equipment by others.
6. December 15, 2023 – Auxiliary PDC Foundation complete to accommodate delivery and installation of PDC equipment by others.
7. December 15, 2023 – Duct bank installation complete to accommodate cable pulling by others.
8. January 12, 2024 – SFC-3 Foundation complete to accommodate delivery and installation of SFC-3 PDC and SFC-3 transformers by others.

A4.2. Volume 3, Part 1, Contract Drawings:

ADD drawing M6-2-1, Rev. 0.

DELETE Rev.0 of the following drawings and REPLACE them with Rev.1: M4-1-1, M4-1-3, M4-1-5, M4-1-6, M4-1-9, M4-1-12, M4-1-13, M4-1-15, M4-1-17, and M6-1-8.

A4.3. Volume 4, Part 2, Reference Drawings, C1403 Conformed to Contract Drawings:

DELETE C1403 Conformed to Contract Drawings and REPLACE with C1403 As-Built Drawings

A4.4. This Addendum includes the following attachments (not included in the page count):

- a. Attachment 1 – C1415 Questions and Responses During Bidding – Dated January 24, 2023.
- b. Attachment 2 – Mechanical drawing set including the eleven-(11) drawings referenced in item A4.2 above.
- c. Attachment 3 – C1403 As-Built Drawing Set.

The changes, additions, and/or deletions included herein are hereby made part of the Contract Documents for the CP-1415 West Power Complex Foundations and Underground Utilities project, as fully and completely as if the same were set forth therein. The bidder shall acknowledge receipt thereof on the Form of Proposal.

*** END OF ADDENDUM ***

C1415 – WPC Foundations and Underground Utilities

Questions and Responses During Bidding

BIDDER QUESTION #1	We do not see the contract duration specified. Please provide.
RESPONSE #1	Contract Time is defined as 330 days, please refer to Addendum 1.
BIDDER QUESTION #2	Wage rates are not linked or attached as stated.
RESPONSE #2	Wage rates were included in Addendum 1.
BIDDER QUESTION #3	Measurement and Payment Spec Section does not match the bid form. The measurement and payment section has 71 items and looks to have a number of unit price items that are to be measured. The Bid Form has 8 items. Please make sure these match.
RESPONSE #3	A revised Bid Form was included in Addendum 1.
BIDDER QUESTION #4	Drawing E06-01 Detail 1 provides detail on reinforcing, spacing of conduits, etc. Drawings E-U-005 and 6 provides different duct bank information and construction information. Which one governs?
RESPONSE #4	<ul style="list-style-type: none">• Details shown on E06-01 apply to duct bank drawings in the E06-XX drawing series as identified on Key Plan Drawing E06-10.• Details shown on E-U-005 and -006 apply for duct bank drawings in the E-U-XXX drawing series as identified on Key Plan Drawing E-A-03.
BIDDER QUESTION #5	Drawing S00-05 includes a soldier pile schedule which states the soldier piles shall be HP16x101 whereas Drawings S-01-08-03 and 04 state that the soldier piles are to be HP14x102. Please clarify.
RESPONSE #5	Soldier Piles shall consist of HP14x102. Drawings will be revised in the conformed contract documents to reflect this.
BIDDER QUESTION #6	Drawing S-01-08-03 details the soldier pile for the retaining wall going into a 24" casing with a call out for Section B of Drawing S-01-08-04 which details this casing as a 30" pile. Please clarify.
RESPONSE #6	Soldier Pile Casings shall be 30" diameter. Drawings will be revised in the conformed contract documents to reflect this.

RESPONSE #9	<ul style="list-style-type: none"> • Section 48 50 90, Cathodic Protection is a performance specification and requires the Contractor to assess the needs and design each piping system based on the specification. Refer to paragraph 1.02. • Refer to Specification Section 01 11 01, Project Summary of Work, paragraph 1.04. • Refer to Specification Section 15 34 42, Underground Piping, paragraph 3.03.A.21.
BIDDER QUESTION #10	Section 33 05 07 Jacking and Boring is including in the bid specifications. This spec does not detail any specific work to be performed on the site and we see that work shown on Drawing C-01-10 but that states for a future contract. Please confirm there is no scope for this spec section in this contract.
RESPONSE #10	Confirmed, Contract 1415 does not include Jacking and Boring, and this Section will be removed from the Conformed Documents.
BIDDER QUESTION #11	Section 26 05 19 Low Voltage wire and Cable is including in the bid specifications. This spec does not detail any specific work to be performed on the site and we do not see any work for this section on the plans. Can it be deleted? If not, please detail specific scope for this spec section.
RESPONSE #11	As noted on the Technical Specifications Table of Contents, Specification Section 26 05 19 Low Voltage Wire and Cable is provided for Reference Only.
BIDDER QUESTION #12	Section 26 05 13 Medium Voltage Cable is including in the bid specifications. This spec does not detail any specific work to be performed on the site and we do not see any work for this section on the plans. Can it be deleted? If not, please detail specific scope for this spec section.
RESPONSE #12	As noted on the Technical Specifications Table of Contents, Specification Section 26 05 13 Medium Voltage Cable is provided for reference only.
BIDDER QUESTION #13	Section 01 31 13 Project Coordination Paragraph 3.04B states that C7/C8 site expectations should be that water will be leaking from C and L basins. How much water should be anticipated and how can the Contractor be expected to quantify this statement? Can this simply be handled with a couple of 2 inch electric sump pumps?
RESPONSE #13	Drainage improvements have been implemented such that leakage from the C and L basins are not anticipated to impact the work. However, the stormwater design for C7 and C8 includes storage and transportation of storm water in the stratum of lightweight aggregate that was installed during the C7/C8 demolition project. The design groundwater elevation is

	<p>-2.0' and is controlled by the outlets from the stormwater detention facilities. During and following major rainfall events, the groundwater elevation is expected to rise above elev. -2.0'. During long periods of no rainfall, the elevation is expected to drop below elev. -2.0. Contractors should expect to deal with groundwater if their operations involve excavation in the vicinity of elev. -2.0. Please note Volume 4, Standard and Reference Drawings, Contract 1403 drawings, as well as the additional reference drawing "C8 French Drain Detail" attached to this Addendum 2.</p>
BIDDER QUESTION #14	Can you please provide the Estimate for Job Carrollton Water Purification Plant West Power Foundations & Underground Utilities?
RESPONSE #14	The Engineer's Opinion of Probable Construction Cost for Contract 1415 is \$40,300,000.
BIDDER QUESTION #15	Drawing 99.02 and 99.03 details embedded anchor bolts for mechanical or electric equipment. Please clarify whether embedded anchors will be required to be installed in this contract for future for mechanical or electric equipment work.
RESPONSE #15	Contract 1415 includes installation of embedded anchor bolts for the mechanical and electrical equipment.
BIDDER QUESTION #16	On Drawing 99.05, the "Column Base – Steel" and the "Post Base – Steel" details both show headed anchor bolts to be embedded for all the future walkways. Is the intent that all of these are pre-installed in these foundations or can the detail be changed to show post installed anchors for the future contract?
RESPONSE #16	Contract 1415 includes installation of embedded anchor bolts for the future walkways.
BIDDER QUESTION #17	What is the Engineer's Opinion of Probable construction Cost?
RESPONSE #17	Refer to the response provided to Question 14.
BIDDER QUESTION #18	Can the levee be degraded and if so, are there any limitations in doing so?
RESPONSE #18	Due to underground utilities within the levee, and considering the final grading required, the levee should not be degraded.
BIDDER QUESTION #19	Please clarify the quantity of ¾" studs that are to be welded HP14x102 into the retaining wall pipe pile. Section B on Drawing S01-08-04 shows 2 EA welded to the web. Drawing S01-08-03 calls for 4 EA to be welded at 12" centers to EACH side of web which could be interpreted as 8 EA on 12" centers.

RESPONSE #19	Both drawings are accurate. To clarify, there are to be 8 EA ¾" studs on each soldier pile, 4 EA on each side of the web.
BIDDER QUESTION #20	Note 6 on Drawing S01-08-02 states that the soldier piles shall be coated to "the full depth of the embedment and up to the top of the piles". Are the ¾" studs welded to these soldier piles to be coated as well?
RESPONSE #20	Studs welded to areas of coated soldier piles must also be coated.
BIDDER QUESTION #21	Is the C-7 road shown on a variety of the drawings (specifically C01-04) part of this contract? We do not see any details on the roadway nor do we see anywhere that states it is not in the contract.
RESPONSE #21	The "roadway" extents shown within the C-7 basin in drawing C01-04 are only illustrating the final drivable access pathways required within the C-7 basin. No road will be constructed. The "road" surface within the C-7 basin shall be restored to the same surface and subsurface materials as is found prior to the beginning of work. That said, drawing C01-05 does detail the levee road construction, including the "Levee Road Section," and encompasses the levee roadway length between Station 100+43.39 to Station 107+12.77.
BIDDER QUESTION #22	Regarding the Soldier Piles (S01-08-01), can a detailed pile schedule be provided with the various lengths (similar to the pipe piles)? <ul style="list-style-type: none"> a. Sheet S00-05 schedule states pile size is HP16 x 101; however, S-01-08-03 call out note states HP 14 x 102. Please Clarify b. The 24" diameter pipe pile with the conical point. Is this only required on the Type B piles? What is the length? Is this required to be augured out full depth prior to installation of the H Pile? c. Can the top and tip of each pile be provided?
RESPONSE #22	<ul style="list-style-type: none"> a. Refer to the response provided to Question 5. b. Soldier Pile Casings shall be 30" diameter. Drawings will be revised in the conformed contract documents. To confirm, the 30" pile casings and conical points are only required on the Type B piles. Pile lengths are as shown on the contract drawings. Auguring for the retaining wall piles is not permitted. Piles are designed as displacement piles; if piles are augured this will violate design. Referencing specification 31 32 19, Geotextile Fabric and Geogrid, paragraph 3.02.B.1, note that pre-drilling is required within the C-7 basin where fabric is present. c. Refer to contract drawing S01-08-02 for pile and pile casing elevations and lengths.

BIDDER QUESTION #23	A milestone schedule is referenced in Section 01 11 01 Paragraph 1.03A, but none is attached.
RESPONSE #23	Please refer to item A4.1 in Addendum 4.
BIDDER QUESTION #24	Spec Section 01 31 13 Paragraph 1.05.A.5. states the Contractor shall include Construction Milestones in the Progress Schedule as they may affect the Sequence of Work. Can those dates be provided?
RESPONSE #24	Please refer to item A4.1 in Addendum 4.
BIDDER QUESTION #25	In review of Drawing C01-09, the Site Grading drawing, and comparing that to the final grades installed on the previous contract, it appears that approximately 2 feet of fill material must be brought in to bring the site up to the final grades provided. Are we to follow Drawing C01-012 to estimate which material? We cannot find another drawing that details the section of this area for backfill requirements. The final elevation of the sand layer on the S&WB 1403 was approximately 0.00'. So are we to assume any backfill above this later to 1 ft below final grade.
RESPONSE #25	C01-09 should be followed for final grades. This sheet should be used to estimate your quantities as well. The section in the basin will be the same as existing section with more lightweight fill to be added to accommodate the difference in elevations. The existing section is shown in the as-builts plans in the reference section of this bid package named as Contract 1403 "Demolition of Abandoned C-7 & C-8 Basins and Other Site Improvements at the Carrollton Water Treatment Plant", sheet C1415 VOL 4 SHT 45 of 194. C01-12 is only for Geotextile Fabric details, and the relative distance of where the geotextile fabric is in relation to the layers of backfill.
BIDDER QUESTION #26	Spec Section 31 23 23 paragraph 3.08 states that the substation site surfacing shall be 6" base course and 4" final course of base course rock which contradicts C01-012. Please clarify.
RESPONSE #26	C01-12 is only for Geotextile Fabric details only, and the relative distance of where the geotextile fabric is in relation to the layers of backfill. Please refer to question 1 for the section of filled to be used in the C7 basin. Spec Section 31 23 23 paragraph 3.08 will be removed in the conformed set of plans.
BIDDER QUESTION #27	Drawing C01-012 also details geotextile fabric being placed beneath duct banks. Is that the intent?
RESPONSE #27	The intent of this drawing is to show that the fill layers should remain separated. If a duct bank falls between the layers of fill, then, yes it will need geotextile fabric to be laid underneath to keep the separation continuous between the two layers.

BIDDER QUESTION #28	Various structural drawings detail rock under the foundations and pile cap supports. What thickness and material is required in these locations? Spec Section 31 23 23 paragraph 2.09 indicates Foundation Stabilization rock to be crushed stone and paragraph 3.02 calls for pump sand beneath structures.
RESPONSE #28	6" of crush stone is to be placed beneath each pile cap unless otherwise noted on drawing. The conformed specification will be modified accordingly.
BIDDER QUESTION #29	Drawing S01-02-04 Pipe Pile Detail states that the Pile Cap subgrade is to be installed in Contract 1429. That is the thickness of this subgrade.
RESPONSE #29	The Operations Center subgrade will be 1'-0".
BIDDER QUESTION #30	Drawings M4-1-1 through M4-1-19 note "BELL PIPE END WITH RESTRAINT HARNESS (TYP)". Detail 4 on DWG M6-2-4 shows the typical connection for the C900 bell and spigot end with the restrainer. Are all bell and spigot joints to receive a pipe-to-pipe restrainer?
RESPONSE #30	Piping within C7 plan does not include long straight runs. Due to many fittings involved and lack of support for thrust blocks, all bell and spigot joints shall include restraint.
BIDDER QUESTION #31	Drawings M4-1-1, M4-1-3, M4-1-5, M4-1-6, M4-1-9, M4-1-12, M4-1-13, M4-1-15, and M4-1-17 note that the Water Valve Manholes shall be as per S&WB DWG No. 6179-F-2. The notes pointing to the valves within the manholes call out "Restrained Joints, PVC, Megalug 2000PV or Equal". S&WB DWG No. 6179-F-2 depicts Ductile Iron piping entering and existing the water valve manholes. Please confirm that the restrained joints within all new water valves manholes will require Ductile Iron piping as per the S&WB detail.
RESPONSE #31	The restrained joints within water valve manholes will require DI piping as shown on S&WB detail. The drawings contained in this question have been revised to remove reference to PVC restraint at valve manholes, and are included as part of this Addendum 4.
BIDDER QUESTION #32	Can you please confirm that the steel beams, posts, columns, grating, and any other structural steel member (other than concrete/masonry embeds i.e., base plates and anchor bolts) are not included in this contract. The Structural Drawings note that Elevated Platforms and Stairs will be in future contracts 1416 & 1420.
RESPONSE #32	C1415 includes the supply and installation of concrete and masonry and all items embedded in concrete and masonry only. For clarification – cast-

	in-place anchor bolts embedded in concrete are in C1415, but base plates and grout pads are NOT in C1415.
BIDDER QUESTION #33	Drawing S3.42 has 7" & 11" square base plates that say "see note 3". Note 3 is a note on grating
RESPONSE #33	Refer to GENERAL SHEET NOTES 3, not SHEET KEYNOTES.
BIDDER QUESTION #34	Drawing S3.52 has 11" square base plates that say "see note 3". Note 3 is a note on grating
RESPONSE #34	Refer to GENERAL SHEET NOTES 3, not SHEET KEYNOTES.
BIDDER QUESTION #35	Drawing S3.52 note 8 calls out 4 column support caps, the drawings show 6.
RESPONSE #35	The note will be updated in the conformed contract documents to reference 6 column support caps.
BIDDER QUESTION #36	Please provide TOC values for the pedestals on drawing S6.01
RESPONSE #36	TOC elevations will be added to a future drawing revision.
BIDDER QUESTION #37	Drawing S8.00 Keynote 2 calls out detail 0330-056 Type X. There is no Type X shown in the detail drawings
RESPONSE #37	Equipment pad requirements will be clarified on a future revision. For bid purpose, price based on Type K.
BIDDER QUESTION #38	Please provide TOC values for the pedestals on drawing S8.00
RESPONSE #38	TOC elevations will be added to a future drawing revision.
BIDDER QUESTION #39	Please provide TOC values for the foundation and walls on drawing S9.12
RESPONSE #39	TOC elevations will be added to a future drawing revision.
BIDDER QUESTION #40	Drawing S10.00 Keynote 2 calls out detail 0330-056 Type X. There is no Type X shown in the detail drawings
RESPONSE #40	Equipment pad requirements will be clarified on a future revision. For bid purpose, price based on Type K.
BIDDER QUESTION #41	Please provide TOC values for the pedestals on drawing S10.00
RESPONSE #41	TOC elevations will be added to a future drawing revision.

BIDDER QUESTION #42	Drawing S15.21 shows elevations for the wall and pad but those do not match the scaled height on drawing S15.22. Please advise which drawing is correct.
RESPONSE #42	Bids to be based on dimensions and elevations as shown.
BIDDER QUESTION #43	Drawing S15.30 shows elevations for the wall and pad but those do not match the scaled height on drawing S15.31. Please advise which drawing is correct.
RESPONSE #43	Bids to be based on dimensions and elevations as shown.
BIDDER QUESTION #44	Drawing S15.00 shows multiple foundations around T7 EER, the T7 EER drawings do not show these foundations.
RESPONSE #44	Bids to be based on foundations as shown on the IFB drawings.
BIDDER QUESTION #45	Drawing S01-08-02, note 6 states soldier piles are to be coated with 40 mil thickness. Specification section 09 90 01 protective coating schedule does not call out the soldier piles. Please confirm soldier piles are coated with 40 mil thickness.
RESPONSE #45	Yes, the protective coating is to be applied to soldier piles per drawing S01-08-02. Specification 09 90 01 will be updated accordingly in the conformed contract documents.
BIDDER QUESTION #46	Drawing S00-05, Pile Testing Note 4 states "See pile location plan drawings S01-02-01, S01-02-02, and S01-02-03 for test pile locations". STP #1 is shown on drawing S01-02-01 and STP #2 is shown on drawing S01-02-03. No pile is noted on S01-02-02 for static testing. Please confirm there are only 2 static tests.
RESPONSE #46	Confirmed, there are only 2 static tests.
BIDDER QUESTION #47	Drawing S3.51, sheet key note 1 states "14" dia steel pile typ 38 plcs". Only 32 piles are shown. Please clarify.
RESPONSE #47	32 piles is correct – see drawing S3.62 for standalone piles/pile caps.
BIDDER QUESTION #48	Please confirm the quantity for Item 11 "14-in Diameter x ½-in Thick Steel Pipe Piles".
RESPONSE #48	See response above.
BIDDER QUESTION #49	On Contract Drawing S0.02, under STEEL PIPE PILES, the notes state that "The Contractor is to soft dig to a relative depth of 10FT below grade prior

RESPONSE #49	<p>to installing piles.” Is this for all piles for the project? Or for piles where a suspected existing utility may be located?</p> <p>In the conformed contract documents the first sentence of the fourth paragraph of STEEL PIPE PILES notes on drawing S0.02, requiring a soft dig to 10FT below grade, will be revised to remove this requirement within the C-7 basin.</p>
BIDDER QUESTION #50	Please consider extending the time period to submit questions.
RESPONSE #50	Extensions to the bid due date and the date for submitting questions have been made. Please refer to Addendum 3.
<p align="center">QUESTIONS BELOW WILL BE ADDRESSED IN A FUTURE ADDENDUM, NO LATER THAN 11AM CENTRAL ON FRIDAY, FEBRUARY 3, 2023</p>	
BIDDER QUESTION #	Specification section 09 90 01, page 13, protective coating schedule notes System 9B for Steel Pipe piles with a minimum coverage of 100 MDFT. Drawing S01-02-04, note 3 states piles are to be coated with 40 mil thickness. Please clarify
RESPONSE #	
BIDDER QUESTION #	Coating length, thickness, and material for the 30” soldier pile casings are not specifically called out on the drawings or in specification 09 90 01. Please provide coating length, thickness, and material for the 30” soldier pile casings
RESPONSE #	
BIDDER QUESTION #	Specification section 31 09 17, page 4, paragraph C states approximately 20 percent of piles will be tested. Drawing S00-05, Installation Construction Note 4 states re-strike testing should be performed on 10% of installed piles onsite. Please confirm that only half of the tested piles will be re-struck
RESPONSE #	
BIDDER QUESTION #	Specification section 31 09 17, page 4, paragraph C states approximately 20 percent of piles will be tested. Drawing S00-05, Installation Construction Note 4 states re-strike testing should be performed on 10% of installed piles onsite. Is the number of test stated above to be performed on both the 14” diameter piles and the 12” diameters piles (i.e. 20% of 14” piles and 20% of 12” piles)?
RESPONSE #	

BIDDER QUESTION #	Specification section 31 09 18 mentions reaction Kentledge/ballast to perform static load testing. Can reaction piles be installed to perform load testing in lieu of the Kentledge method?
RESPONSE #	
BIDDER QUESTION #	Supplementary Condition 6.02.C. states that the contractor will be responsible for reimbursing the owner for the inspector's overtime. What is the anticipated cost per day/per hour for the inspector? What is the anticipated work schedule for the QA Inspector/Designated Inspector per week?
RESPONSE #	
BIDDER QUESTION #	Supplementary Condition 6.08.A. states the Contractor shall obtain all required permits from the City of New Orleans. What City of New Orleans permits will be required of the Contractor for this project?
RESPONSE #	
BIDDER QUESTION #	Specification Section 31 23 19, 3.03, A. MONITORING GROUNDWATER LEVELS: States that the contractor is to install and monitor observation wells at locations selected by the Engineer. How many locations will be monitored?
RESPONSE #	
BIDDER QUESTION #	Specification Section 31 23 19, 3.04, A. MONITORING DEWATERING-INDUCED SETTLEMENT – states that the contractor is to establish monuments for monitoring settlement at locations selected by the Engineer. How many locations are anticipated for monitoring?
RESPONSE #	
BIDDER QUESTION #	Is the contractor required to submit all required plans and information highlighted in Specification Section 01 88 15, Anchorage and Bracing? The specification section highlights the anchorage and bracing for equipment, piping, mechanical work, anchor bolts and plates, etc. Please clarify what is expected under this contract for the foundations and underground utilities.
RESPONSE #	
BIDDER QUESTION #	Drawing C01-12 shows 3' of lightweight fill but drawings the Contract 1403 drawings show a minimum of 1' lightweight aggregate. Please advise the average depth of light weight aggregate.
RESPONSE #	

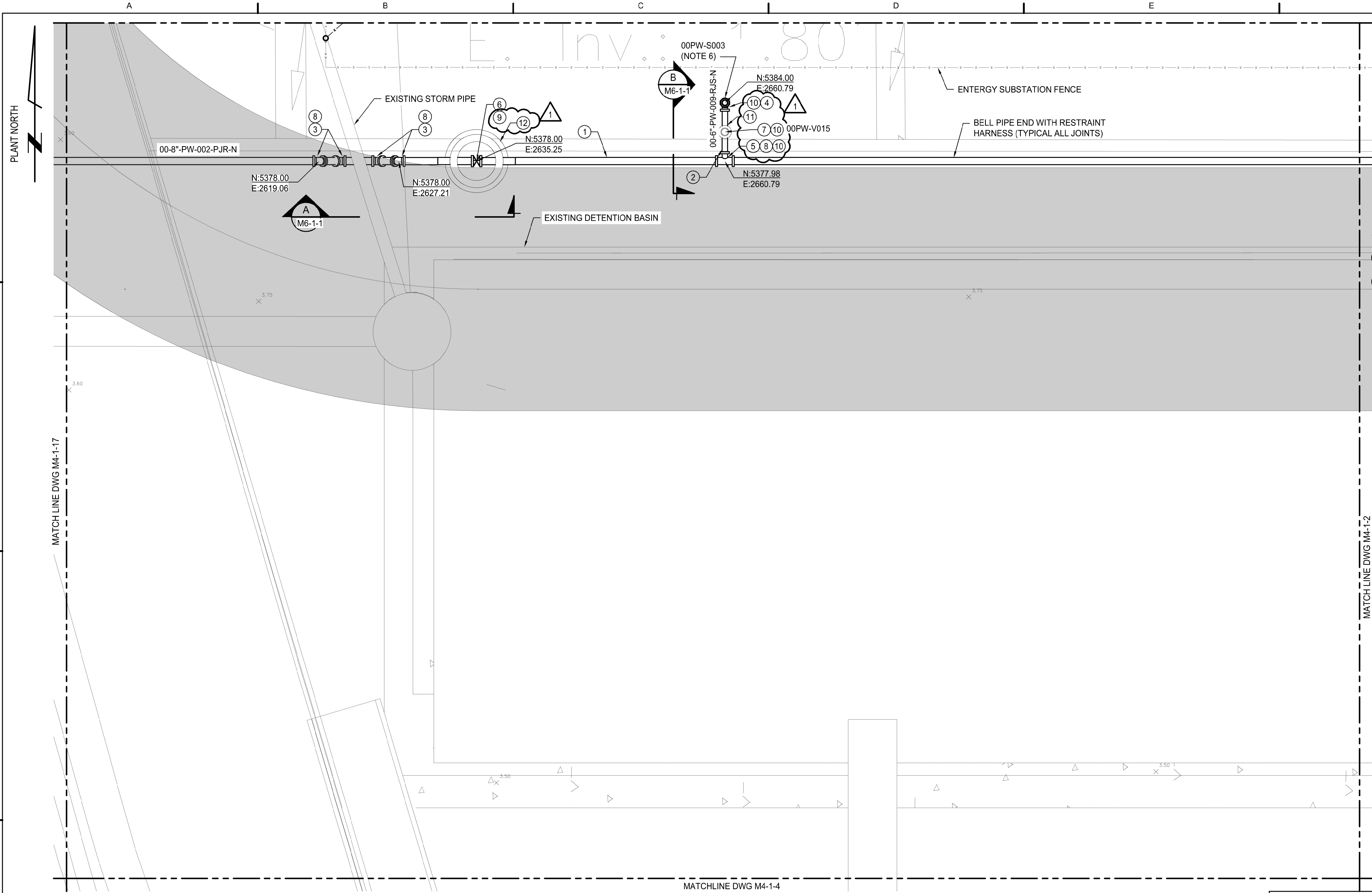
BIDDER QUESTION #	The civil grading plan (drawing C01-09) shows existing grades to be between 3 and 5 but Contract 1403 drawings show the existing grade to be between 2 and 3. Please advise which drawings are correct for current site grade.
RESPONSE #	
BIDDER QUESTION #	Please advise what bid items the following plans go under <ul style="list-style-type: none"> a. BOP Generator Foundation – S7.00 & S7.10 b. BOP Miscellaneous Pad – S8.00 & S8.10 c. T7 Generator – S15.10 thru S15.13 d. T7 LV XFMR – S15.30 & S15.31
RESPONSE #	
BIDDER QUESTION #	Please advise what bid items the following plans go under <ul style="list-style-type: none"> a. 20 – BOP Subplot: BSG Foundation b. 21 – BOP Subplot: Air Compressor Foundation c. 23 – CTG7 Sublot: CTG Foundation d. 25 – CTG7 Subplot: Aux Transformer Foundation
RESPONSE #	
BIDDER QUESTION #	Bid Items 59 thru 66 describe the Duct Banks by which letter sectional view and can be found on drawings E06-10 thru E06-14. Can Bid Items 67 thru 69 be given more detail?
RESPONSE #	
BIDDER QUESTION #	Bid drawings E-U-B02 to E-U-F05 shows “electrical belowground raceways,” but give no specific details outside of the number and size of conduit at each location. We assume that the intent is to cast the raceways in the foundation slab at each respective location. Please confirm. If not, are the only underground ductbanks in this contract shown on drawings E06 – 3 through E06-14?
RESPONSE #	
BIDDER QUESTION #	Drawing E-U-F06 and E-U-F07 show a raceway outside of the foundation slabs. Should this raceway be a duct bank? If so, should we follow the details shown in drawing E06-01 for an appropriate sizing? Please advise. If these raceways between foundations are to be in a ductbank, should they be pile supported? If not, are the only underground ductbanks in this contract shown on drawings E06 – 3 through E06-14?

RESPONSE #	
BIDDER QUESTION #	In review of Add #2 response to question #15, can you please provide the electrical and mechanical equipment information so that we can properly estimate anchors location and sizing?
RESPONSE #	
BIDDER QUESTION #	Are the elevations shown on drawings G1-0 and C01-09 the current elevations at the site now?
RESPONSE #	
BIDDER QUESTION #	Please provide the location limits of any required fill material that must be brought to the site to adjust the current elevations on site to the required elevations for individual structure foundations.
RESPONSE #	
BIDDER QUESTION #	Are the test pilings included in the respective piling item linear footage for measurement and payment?
RESPONSE #	
BIDDER QUESTION #	Is the additional 10% longer length required for test pilings included in the respective piling item linear footage for measurement and payment?
RESPONSE #	
BIDDER QUESTION #	Contract 1415 documents note that the surveying and layout is to be conducted by a PLS or Civil Engineer with a P.E. Is this all surveying and layout (elevations, grade, vertical controls, horizontal controls), or can the layout be conducted under the supervision of a PLS/Civil P.E.?
RESPONSE #	
BIDDER QUESTION #	E15-02 Conduit Schedule (sheets 292-296 of 490) references conduit sizes 4" & 6" only. On drawings E06-03, Duct Bank Sections & Details A6 & A7 show conduits DM0001 – DM0008 sized as 5". On E15-02 sheet 2 of 5 these conduits are noted as 4". Should we assume the conduit schedule is correct?
RESPONSE #	
BIDDER QUESTION #	E15-02 Conduit Schedule (sheets 292-296 of 490) references conduit sizes 4" & 6" only. On drawings E06-04, Duct Bank Sections & Details B & A12 show conduits DH0012 – DH0015 & DM0009 – DM0011 sized as 5". On

RESPONSE #	E15-02 sheet 2 of 5 these conduits are noted as 6". Should we assume the conduit schedule is correct?
BIDDER QUESTION #	According to the Conduit Schedule E15-02, Raceway tag numbers DF0001 – DF0006 are noted as 4" RGS and are to be concrete encased along with other PVC raceways. Is it acceptable to utilize concrete tight threadless connectors to join the RGS runs of conduit in the duct banks?
RESPONSE #	
BIDDER QUESTION #	There are 2 different type ground test wells called out in the contract documents, drawings E05-01 Detail 1 and E-G-05 Ground Test Well detail. Can one specific type be selected for typical use? If so, please advise on which type to figure.
RESPONSE #	
BIDDER QUESTION #	Is a Lightning Protection System required for CN 1415?
RESPONSE #	
BIDDER QUESTION #	Can the 3D model be shared with the bidders to reference?
RESPONSE #	
BIDDER QUESTION #	There are 7 manholes located on drawings E-U-B02 – E-U-F07. What size do these manholes need to be? Please provide a design detail (i.e., physical size, conduit rough in locations and elevations, etc.) as drawing E-U-03 does not provide the needed information.
RESPONSE #	
BIDDER QUESTION #	What type and size manhole covers are required for the above-mentioned manholes?
RESPONSE #	
BIDDER QUESTION #	Specification section 26 00 10, 1.02A states that duct banks and manholes shall be pile supported. There is no structural design information that can be found for the duct banks and manholes shown on drawings E-U-B02 – E-U-F07.
RESPONSE #	

BIDDER QUESTION #	What elevations do the duct banks and manholes need to be set at, that are on drawings E-U-B02 – E-U-F07?
RESPONSE #	
BIDDER QUESTION #	Drawing 99.10 has a pile detail that differs from what is shown on S01-02-04. Please confirm which to use
RESPONSE #	
BIDDER QUESTION #	Is the contractor required to install racks in the Entergy provided manholes?
RESPONSE #	
BIDDER QUESTION #	Drawing E-U-E06 shows manhole WPAUX-MH03.00 but does not have show any duct bank routing to it. It does have a note above the manhole noting 4x6" & 6x4" ducts. Should the duct bank for this manhole match the one for WPAUX-MH02.00? If not, please provide routing of MH03 duct banks.
RESPONSE #	
BIDDER QUESTION #	Drawing S01-08-03 shows the cut section of the retaining wall but the existing levee is not shown. Can the existing levee be shown on this drawing so we can calculate the cut and fill required to install the new retaining wall.
RESPONSE #	
BIDDER QUESTION #	Drawing S00-002 states the cast in place concrete will be 5,000 psi strength and that rebar splices are to be 62 bar diameters in length. Drawing S0.01 has a chart for rebar splice lengths stating the concrete mix shall be 4,000 psi mix. Can this discrepancy be clarified regarding rebar lengths and concrete strengths?
RESPONSE #	
BIDDER QUESTION #	On Drawing S01-02-04, we have a few questions regarding the pile cap plates and rebar for tension connectors: <ul style="list-style-type: none"> a. Is this detail required for all piles? b. Does this material need to be coated like the piles or remain bare? c. Does the coating at pipe pile weld to plate need to be coated prior to placing concrete?
RESPONSE #	

BIDDER QUESTION #	Drawing S8.9 and Drawing S8.10 show different diameters for the pipe pile. Are these to be 12" or 14"? Also, qty is incorrect as it states 4 EA but shows 10 EA.
RESPONSE #	
BIDDER QUESTION #	Drawing S15.3 and Drawing S15.31 show different diameters for the pipe pile. Are these to be 12" or 14"?
RESPONSE #	
BIDDER QUESTION #	Please confirm the quantities for the 12" and 14" piles. Our estimated quantities are more for the 12" and less for the 14".
RESPONSE #	
BIDDER QUESTION #	Please clarify the response to Question No. 19 which states "to clarify, there are 8 EA ¾" studs total per soldier pile". Drawing S01—08-03 references 12" centers. So are there 8 EA studs x 12 inch centers on a 50 ft pile for a total of 400 per soldier pile or just 8 total? The answer differs from this drawing.
RESPONSE #	

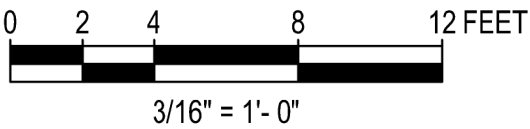


LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	8
2	PIPE, CEMENT-MORTAR LINED, DUCTILE-IRON WATER PIPE, AWWA C151, CLASS 52	6
3	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	8
4	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	6
5	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	8 x 6
6	VALVE, SEE S&WB DWG. 11897-W-62	8
7	VALVE, SEE S&WB DWG. 11897-W-62	6
8	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	8
9	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	8
10	TR FLEX RESTRAINED JOINT	6
11	VALVE BOX, PER S&WB DWG NO. 6179-F-2	1
12	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	

- NOTES:
1. PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 2. ALL MECHANICAL JOINTS NEED RESTRAINTS.
 3. ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 4. ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
 5. PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 6. HYDRANT DETAILS PER S&WB DWG NO. 6179-F-2.
 7. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.
 8. WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
 9. CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
 10. CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6". 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY

UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"



POWER ENGINEERS
Power Engineers Inc. - Louisiana State
Certificate of Registration # EP2655

DESIGNED BY: M. STALLINGS
FILE NAME: M4-1-1.dwg

DATE: 5/27/22
JOB NO.: 174602
SCALE: 3/16"=1'-0"
DATE: 5/27/22

ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

SEWERAGE AND WATER BOARD
OF NEW ORLEANS

CONTRACT No. 1415
CARROLLTON WATER PURIFICATION PLANT
WPC FOUNDATIONS AND UNDERGROUND PACKAGE

MECHANICAL
UNDERGROUND PIPING PLAN

DR. C. PARRISH
CK. T. KUTLOWSKI
AP. M. STALLINGS

LAST EDIT:

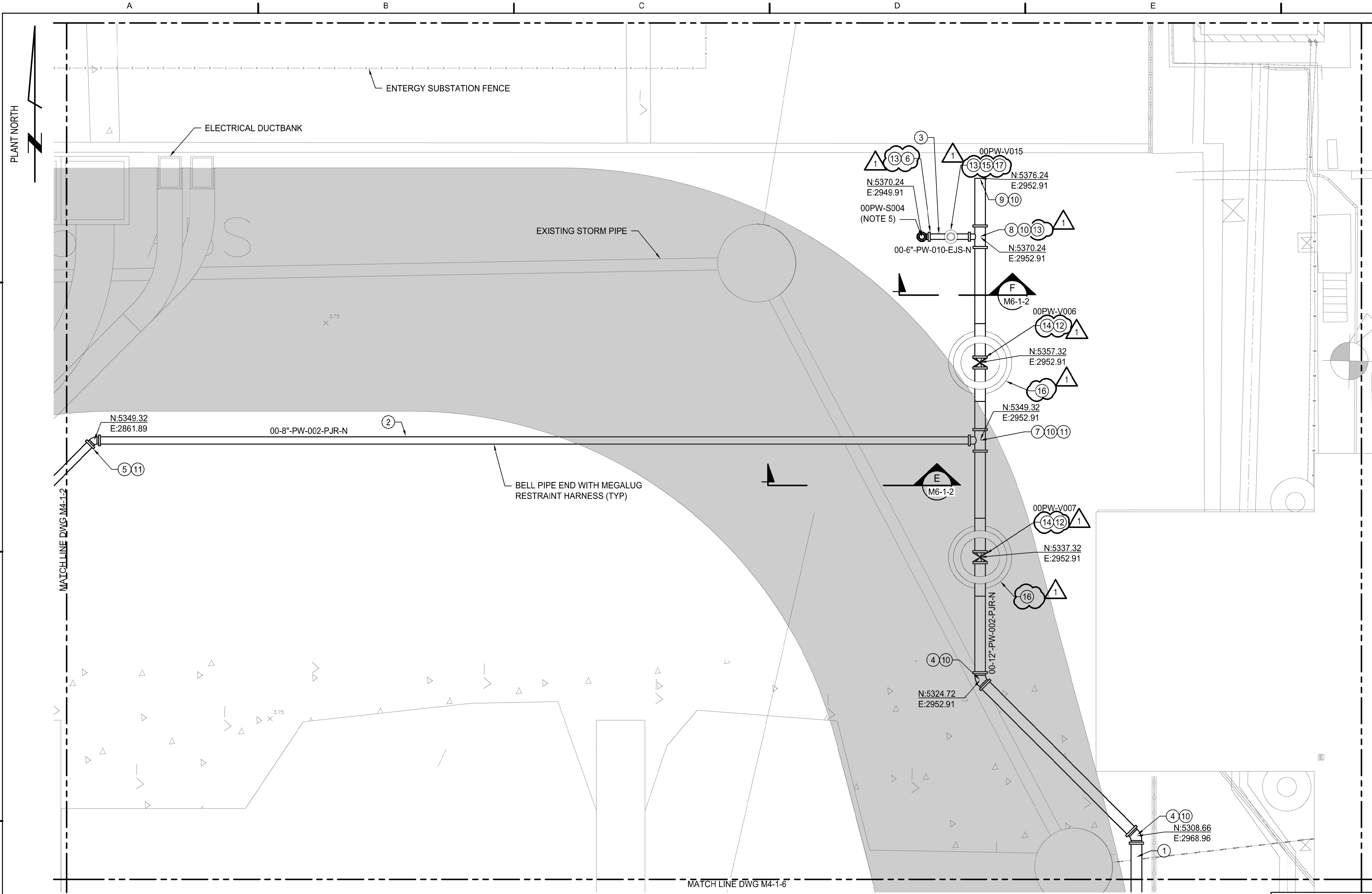
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DATE: 5/27/22

A/E DWG NO.: M4-1-1

DWG. No. 12182-W25

SET NO.: 1/19/2023
SHEET NO.: OF 5:04:54 PM

BID PACKAGE - NOT FOR CONSTRUCTION



LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	8
3	PIPE, CEMENT-MORTAR LINED, DUCTILE-IRON WATER PIPE, AWWA C151	6
4	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12
5	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	8
6	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	6
7	TEE, REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 8
8	TEE, REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 6
9	CAP, MECHANICAL JOINT, DUCTILE-IRON FITTINGS, AWWA C110, 350 PSI	12
10	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
11	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	8
12	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	12
13	TR FLEX RESTRAINED JOINT	6
14	VALVE, SEE S&WB DWG. 11897-W-62	12
15	VALVE, SEE S&WB DWG. 11897-W-62	6
16	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	1
17	VALVE BOX, PER S&WB DWG NO. 6179-F-2	

- NOTES:
- FOR PIPING MATERIAL AND COATING DETAILS REFERENCE PIPING MATERIALS SPECIFICATIONS PJR, EJS, AND AHH.
 - FOR VALVE DETAILS REFERENCE VALVE SPECIFICATIONS GAEK76.
 - CORROSION PROTECTION TO BE PROVIDED ON CARBON STEEL PIPING SPECIFICATION AHH AND ANY DUCTILE IRON PIPE AND FITTINGS INCLUDED ON THE WATER MAIN.
 - FOR WATER PIPING INSTALLATION AND DETAILS REFER TO S&WB DWG. NO. 7260-W.
 - FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS REFER TO S&WB DWG. NO. 6179-F.
 - TESTING, FLUSHING, AND CHLORINATION DETAILS SHOWN ON S&WB DWG NO. 7004-W.
 - CONTRACTOR TO VERIFY ALL EXISTING INFRASTRUCTURE AND UTILITIES.
 - CAP INDICATES END OF C7 BASIN PIPING (1415) SCOPE. CONTINUATION OF WATER SERVICE ALONG C8 BASIN IN CONTRACT 1431.

1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY

STATE OF LOUISIANA

SARAH AMANDA STALLINGS

License No. 46647

PROFESSIONAL ENGINEER

ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

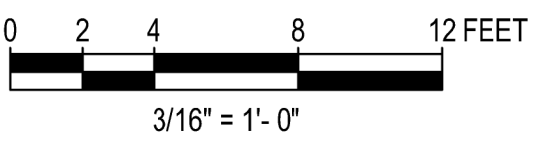
SEWERAGE AND WATER BOARD
OF NEW ORLEANS

CONTRACT No. 1415
CARROLLTON WATER PURIFICATION PLANT
WPC FOUNDATIONS AND UNDERGROUND PACKAGE

MECHANICAL
UNDERGROUND PIPING PLAN

DR.	C. PARRISH	A/E DWG NO.	
CK.	T. KUTLOWSKI		M4-1-3
AP.	M. STALLINGS		
LAST EDIT:			
SCALE:	3/16"=1'-0"	DWG. No.	12182-W25
DATE:	5/27/22	SET NO:	
		SHEET NO:	OF

UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"



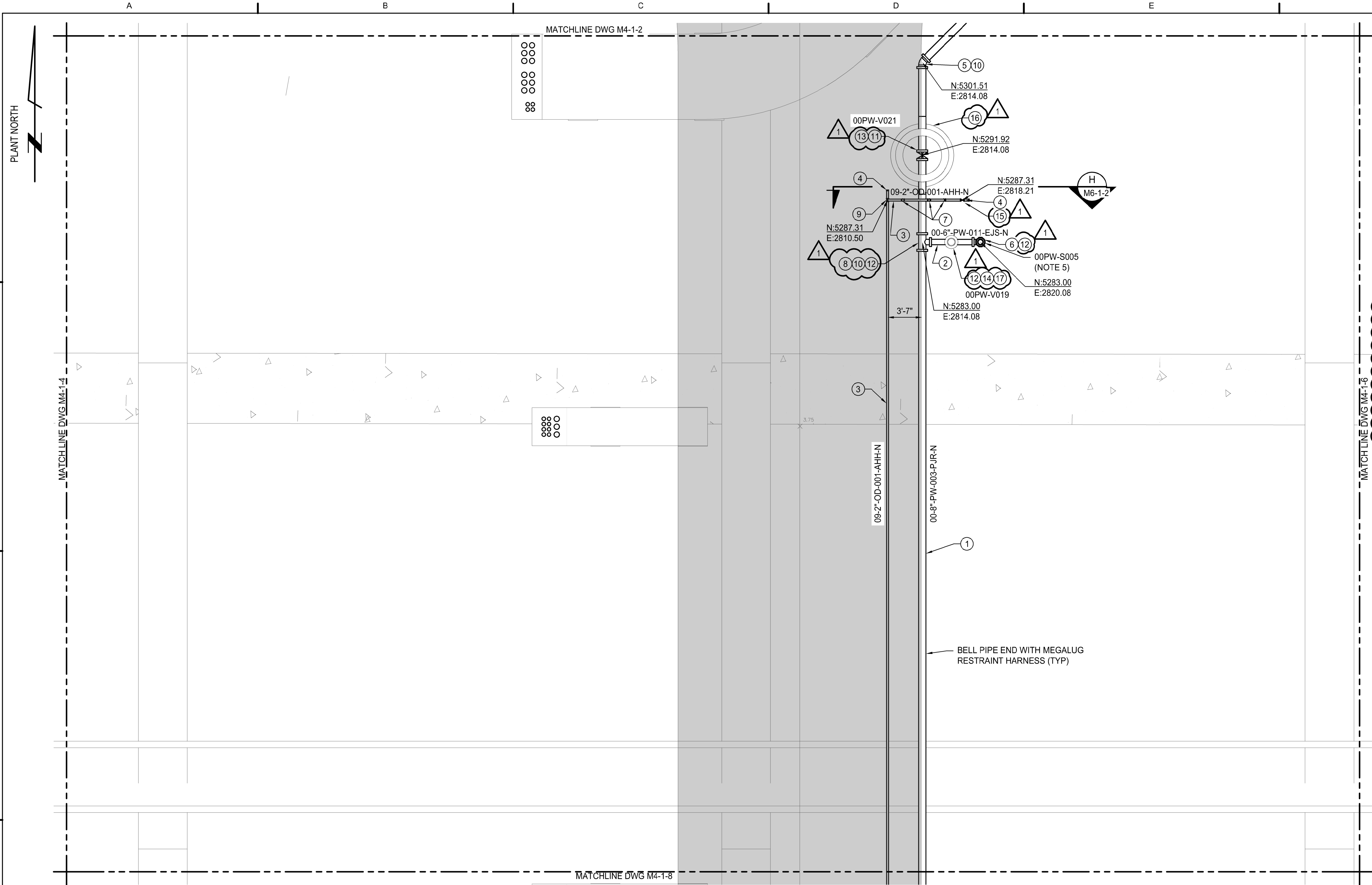
POWER ENGINEERS

Power Engineers Inc. - Louisiana State
Certificate of Registration # EP2455

DATE	5/27/22	JOB NO.	174602
DESIGNED BY:	M. STALLINGS		
FILE NAME:	M4-1-3.dwg		

DR.	C. PARRISH	A/E DWG NO.	
CK.	T. KUTLOWSKI		M4-1-3
AP.	M. STALLINGS		
LAST EDIT:			
SCALE:	3/16"=1'-0"	DWG. No.	12182-W25
DATE:	5/27/22	SET NO:	
		SHEET NO:	OF

BID PACKAGE - NOT FOR CONSTRUCTION



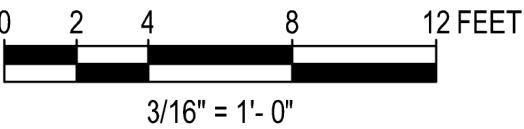
LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	8
2	PIPE, CEMENT-MORTAR LINED, DUCTILE-IRON WATER PIPE, AWWA C151, CLASS 52	6
3	PIPE, SOCKET WELD, ASTM A106 GR B, ASME B36.10M SCH 80 PLAIN END	2
4	CAP, SOCKET WELD, ASTM A105, ASME B16.11, CLASS 3000	2
5	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS, AWWA C110, 350 PSI	8
6	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	6
7	45° ELBOW, ASTM A105, ASME 16.11, CLASS 3000 SW	2
8	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	8 x 6
9	TEE, SOCKET WELD, ASTM A105, ASME B16.11, CLASS 3000	2
10	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	8
11	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	8
12	TR FLEX RESTRAINED JOINT	6
13	VALVE, SEE S&WB DWG. 11897-W-62	8
14	VALVE, SEE S&WB DWG. 11897-W-62	6
15	VALVE, GATE, SW, CL 1800, CARBON STEEL, A105, OS&Y, SEE GAAE10	2
16	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	
17	VALVE BOX, PER S&WB DWG NO. 6179-F-2	


- NOTES:**
1. PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 2. ALL MECHANICAL JOINTS NEED RESTRAINTS.
 3. ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 4. ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260-W.
 5. FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS SEE S&WB DWG. NO. 6179-F.
 6. TESTING, FLUSHING AND CHLORINATION DETAILS SHOWN ON S&WB DWG. NO. 7004-W.
 7. PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 8. CAP INDICATES END OF C7 BASIN PIPING (1415) SCOPE. CONTINUATION OF WATER SERVICE ALONG C8 BASIN IN SEPARATE CONTRACT.

- NOTES (CONTINUED):**
9. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.
 10. WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
 11. FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.

- NOTES (CONTINUED):**
12. CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING AND FITTINGS UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
 13. CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6". 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"



**POWER ENGINEERS**
Power Engineers Inc. - Louisiana State
Certificate of Registration # EP2655

DESIGNED BY: M. STALLINGS
FILE NAME: M4-1-5.dwg

DR. C. PARRISH
CK. T. KUTLOWSKI
AP. M. STALLINGS

DATE 5/27/22
SCALE 3/16"=1'-0"
DATE 5/27/22

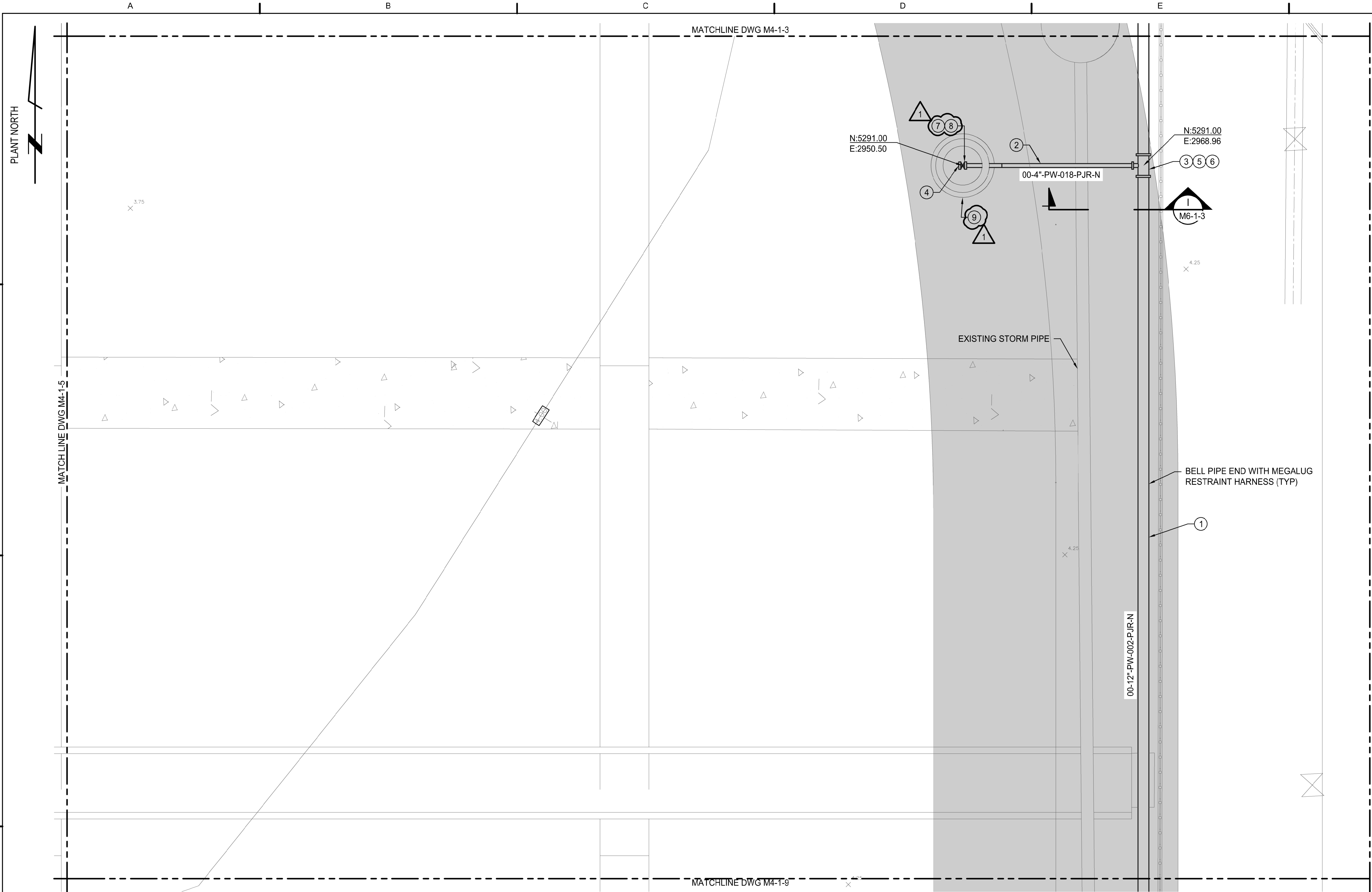
JOB NO. 174602



ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

SEWERAGE AND WATER BOARD OF NEW ORLEANS			
CONTRACT No. 1415 CARROLLTON WATER PURIFICATION PLANT WPC FOUNDATIONS AND UNDERGROUND PACKAGE			
MECHANICAL UNDERGROUND PIPING PLAN			
DWG. No.		12182-W25	
DATE: 5/27/22		SET NO:	SHEET NO: OF
1/19/2023			5:03:10 PM

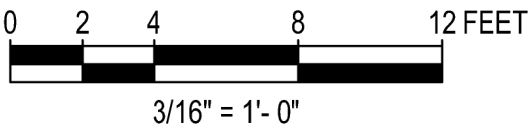
BID PACKAGE - NOT FOR CONSTRUCTION



LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, BELL x SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	4
3	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 4
4	CAP, MJ, DUCTILE IRON AWWA C110	4
5	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
6	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	4
7	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	4
8	VALVE, SEE S&WB DWG. 11897-W-62	4
9	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	

- NOTES:**
- PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 - ALL MECHANICAL JOINTS NEED RESTRAINTS.
 - ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 - ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
 - PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 - FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.
 - CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.
 - WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
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 - CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6". 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"

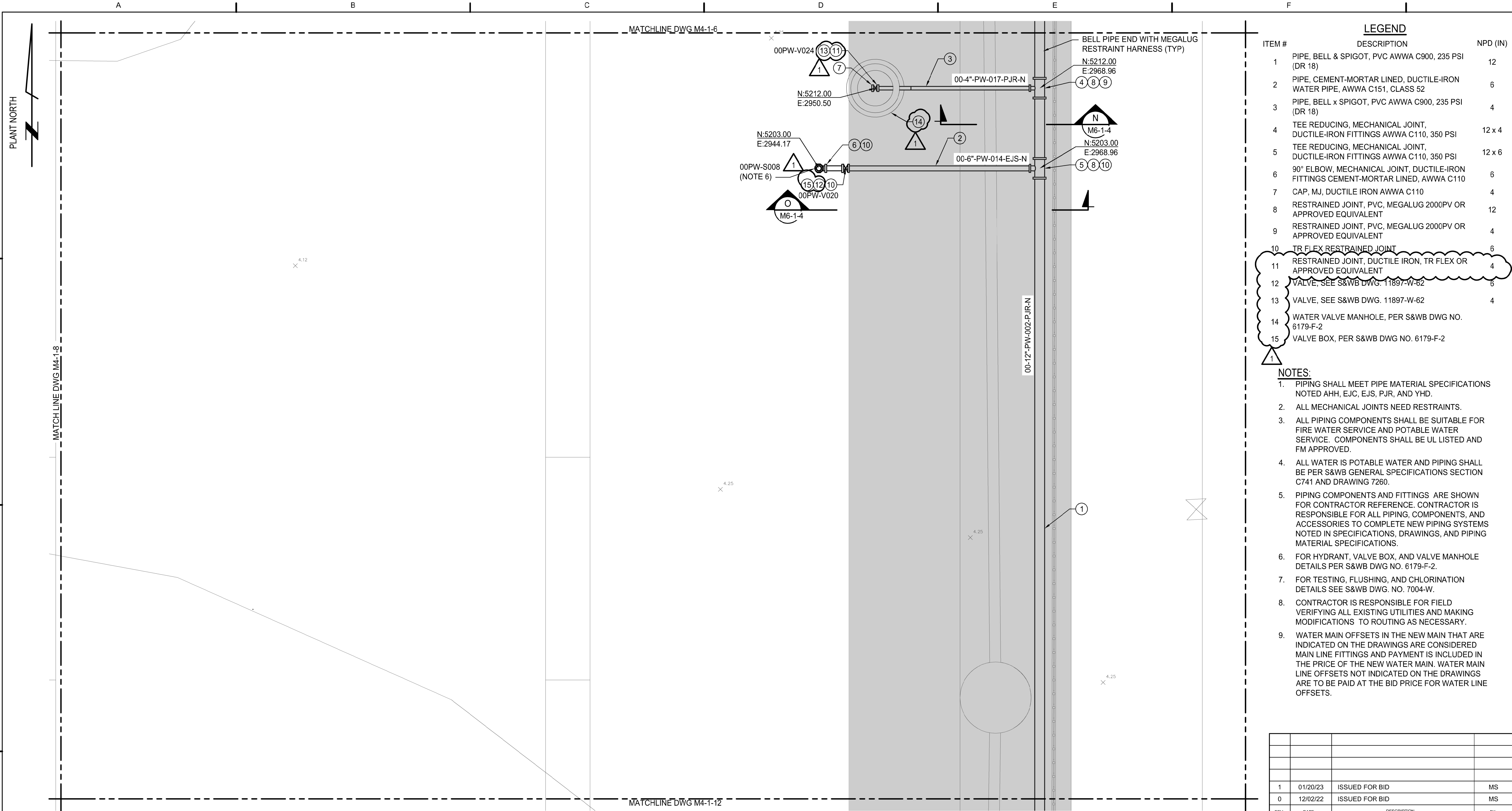


ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

DR.	C. PARRISH
CK.	T. KUTLOWSKI
AP.	M. STALLINGS
DATE	5/27/22
DESIGNED BY:	M. STALLINGS
FILE NAME:	M4-1-6.dwg

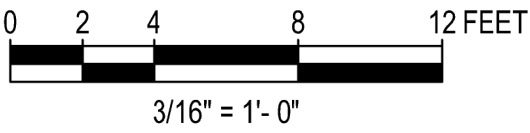
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0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY
SEWERAGE AND WATER BOARD OF NEW ORLEANS			
CONTRACT No. 1415 CARROLLTON WATER PURIFICATION PLANT WPC FOUNDATIONS AND UNDERGROUND PACKAGE			
MECHANICAL UNDERGROUND PIPING PLAN			
DWG. No.		12182-W25	
DATE:	5/27/22	SET NO:	1/19/2023
DATE:	5/27/22	SHEET NO:	5:01:08 PM

BID PACKAGE - NOT FOR CONSTRUCTION



- NOTES (CONTINUED):**
- 10. CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING AND FITTINGS UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
 - 11. CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6". 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"



LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, CEMENT-MORTAR LINED, DUCTILE-IRON WATER PIPE, AWWA C151, CLASS 52	6
3	PIPE, BELL x SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	4
4	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 4
5	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 6
6	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	6
7	CAP, MJ, DUCTILE IRON AWWA C110	4
8	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
9	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	4
10	TR FLEX RESTRAINED JOINT	6
11	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	4
12	VALVE, SEE S&WB DWG. 11897-W-62	6
13	VALVE, SEE S&WB DWG. 11897-W-62	4
14	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	
15	VALVE BOX, PER S&WB DWG NO. 6179-F-2	

- NOTES:**
- 1. PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 - 2. ALL MECHANICAL JOINTS NEED RESTRAINTS.
 - 3. ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 - 4. ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
 - 5. PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 - 6. FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS PER S&WB DWG NO. 6179-F-2.
 - 7. FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.
 - 8. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.
 - 9. WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.

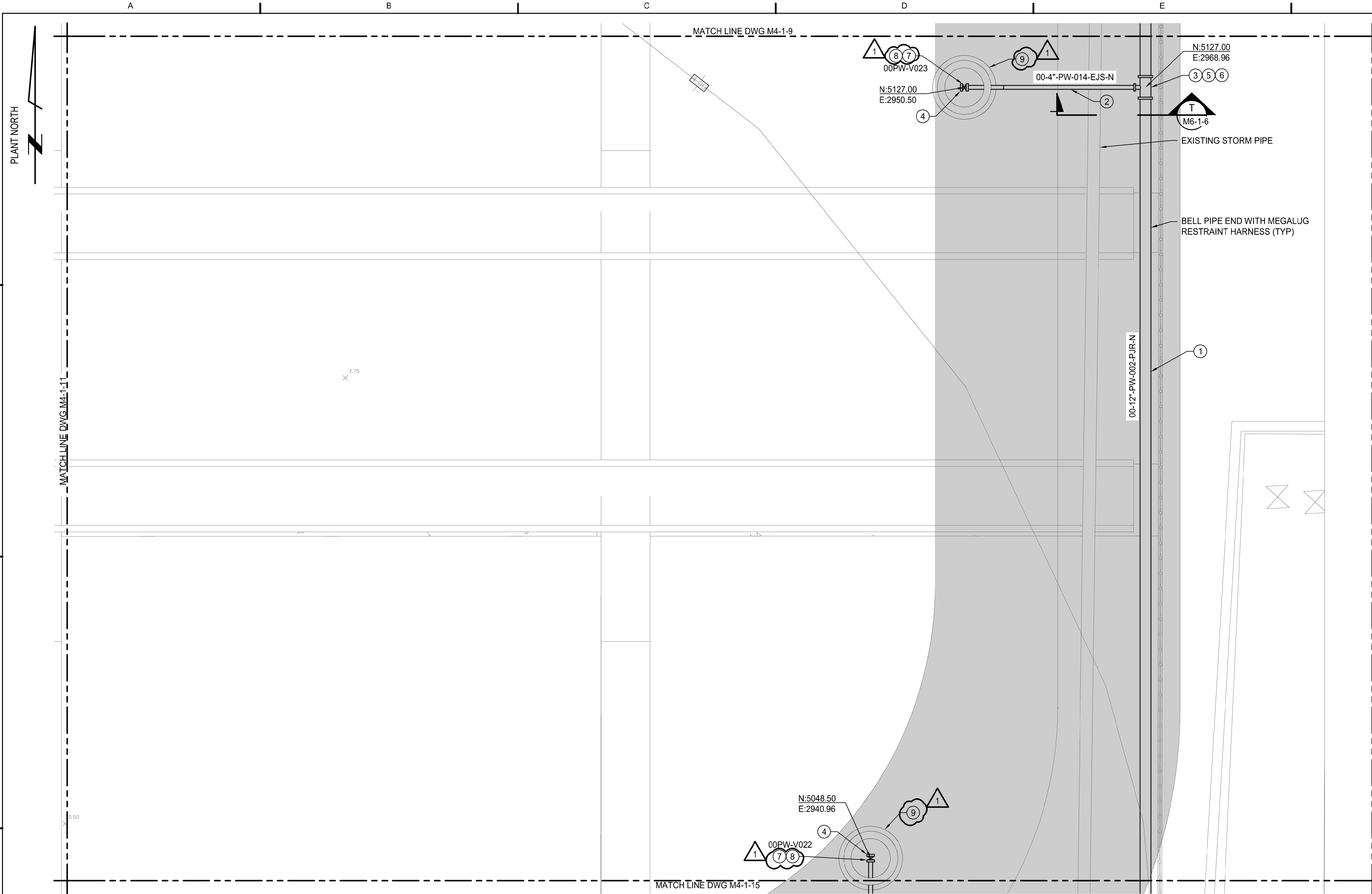
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0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY
SEWERAGE AND WATER BOARD OF NEW ORLEANS			
CONTRACT No. 1415 CARROLLTON WATER PURIFICATION PLANT WPC FOUNDATIONS AND UNDERGROUND PACKAGE			
MECHANICAL UNDERGROUND PIPING PLAN			
DR. C. PARRISH		A/E DWG NO.	
CK. T. KUTLOWSKI		M4-1-9	
AP. M. STALLINGS			
LAST EDIT:			
SCALE: 3/16"=1'-0"		DWG. No. 12182-W25	
DATE: 5/27/22		SET NO:	SHEET NO: OF
1/19/2023			5:05:48 PM



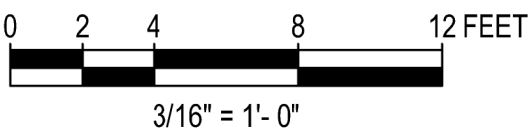
POWER ENGINEERS
Power Engineers Inc. - Louisiana State
Certificate of Registration # EP24655

ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

DATE	5/27/22	JOB NO.	174602
DESIGNED BY:	M. STALLINGS		
FILE NAME:	M4-1-9.dwg		



UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"



LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, BELL x SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	4
3	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 4
4	CAP, MJ, DUCTILE IRON AWWA C110	4
5	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
6	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	4
7	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	4
8	VALVE, SEE S&WB DWG. 11897-W-62	4
9	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	

- NOTES:
1. PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 2. ALL MECHANICAL JOINTS NEED RESTRAINTS.
 3. ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 4. ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
 5. PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 6. FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS PER S&WB DWG NO. 6179-F-2.
 7. FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.
 8. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.
 9. WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
 10. CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING AND FITTINGS UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
 11. CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6" . 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY

STATE OF LOUISIANA

SARAH AMANDA STALLINGS
License No. 46647
PROFESSIONAL ENGINEER

ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

POWER ENGINEERS
Power Engineers Inc. - Louisiana State
Certificate of Registration # EP2455

DR. C. PARRISH
CK. T. KUTLOWSKI
AP. M. STALLINGS
LAST EDIT:
SCALE: 3/16"=1'-0"
DATE: 5/27/22

DESIGNED BY: M. STALLINGS
FILE NAME: M4-1-12.dwg

DATE 5/27/22JOB NO. 174602
SET NO. OF
1/20/20239:13:32 AM

SEWERAGE AND WATER BOARD
OF NEW ORLEANS

CONTRACT No. 1415
CARROLLTON WATER PURIFICATION PLANT
WPC FOUNDATIONS AND UNDERGROUND PACKAGE

MECHANICAL
UNDERGROUND PIPING PLAN

DR. C. PARRISH
CK. T. KUTLOWSKI
AP. M. STALLINGS
LAST EDIT:
SCALE: 3/16"=1'-0"
DATE: 5/27/22

A/E DWG NO.
M4-1-12
DWG. No. 12182-W25
SET NO. OF
1/20/20239:13:32 AM

BID PACKAGE - NOT FOR CONSTRUCTION

PLANT NORTH

4

3

2

1

HOLD FOR FINAL LOCATION OF
SANITARY, MANHOLE, AND END
POINT OF 1415 OILY DRAINS.
END OF 1415 PACKAGE TO BE
DETERMINED WITH
CONTRACTIBILITY OF FUTURE
PACKAGES CONSIDERED.

LOCATION OF ABOVE GROUND
OIL/WATER SEPARATOR

SANITARY TO BE
PER SWBNO
SPECIFICATIONS

N:4990.28
E:2637.92
INVERT EL 8'-1¹⁵/₁₆"

MATCHLINE DWG M4-1-16

MATCHLINE DWG M4-1-10

LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	10
3	PIPE, BEVELED END, ASTM A53 GR B, TYPE "E" OR "S", ASME B36.10M STD WT	3
4	PIPE, DOUBLE WALL PIPING WITH LEAK DETECTION, MATERIAL SPEC YHD	6
5	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	10
6	45° ELBOW, BEVELED END, ASTM A234 GR WPB, ASME B16.9, SEAMLESS OR WELDED, STD WT	3
7	90° ELBOW, BEVELED END, ASTM A234 GR WPB, ASME B16.9, SEAMLESS OR WELDED, STD WT	3
8	90° ELBOW, DOUBLE WALL PIPING WITH LEAK DETECTION	6
9	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS, AWWA C110, 350 PSI	12
10	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS, AWWA C110, 350 PSI	12
11	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 10
12	TEE, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12
13	FLANGE, TEMPORARY FITTING ON DOUBLE WALL PIPING	6
14	BLIND FLANGE, TEMPORARY CLOSURE ON DOUBLE WALL PIPING	6
15	FLANGE, BUTT WELD, RF, CLASS 150, ASTM 105, ASME B16.5, STD BORE, WN OR SLIP-ON	3
16	BLIND FLANGE, RF, CLASS 150, ASTM A105, ASME B16.5	3
17	CAP, MJ, DUCTILE IRON AWWA C110	10
18	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
19	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	10
20	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	12
21	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	10
22	VALVE, SEE S&WB DWG. 11897-W-62	12
23	VALVE, SEE S&WB DWG. 11897-W-62	10
24	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	
25	SPECILITY PIPING 00PW-S010, ROLLED STAINLESS CONNECTION PIECE WITH RESTRAINTS, SEE M6-2-1 FOR DETAILS	12

NOTES:

1. PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
2. ALL MECHANICAL JOINTS NEED RESTRAINTS.
3. ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
4. ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
5. PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
6. FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS PER S&WB DWG NO. 6179-F-2.
7. FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.
8. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.

NOTES (CONTINUED):

9. WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
10. CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING AND FITTINGS UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
11. CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6". 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

UNDERGROUND PIPING PLAN

SCALE: 3/16"=1'-0"

HOLD FOR FINAL LOCATION
AND VALVE MANHOLE
REQUIREMENT. LOCATION OF
EXISTING UNDERGROUND
UTILITIES TO BE CONFIRMED.



ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

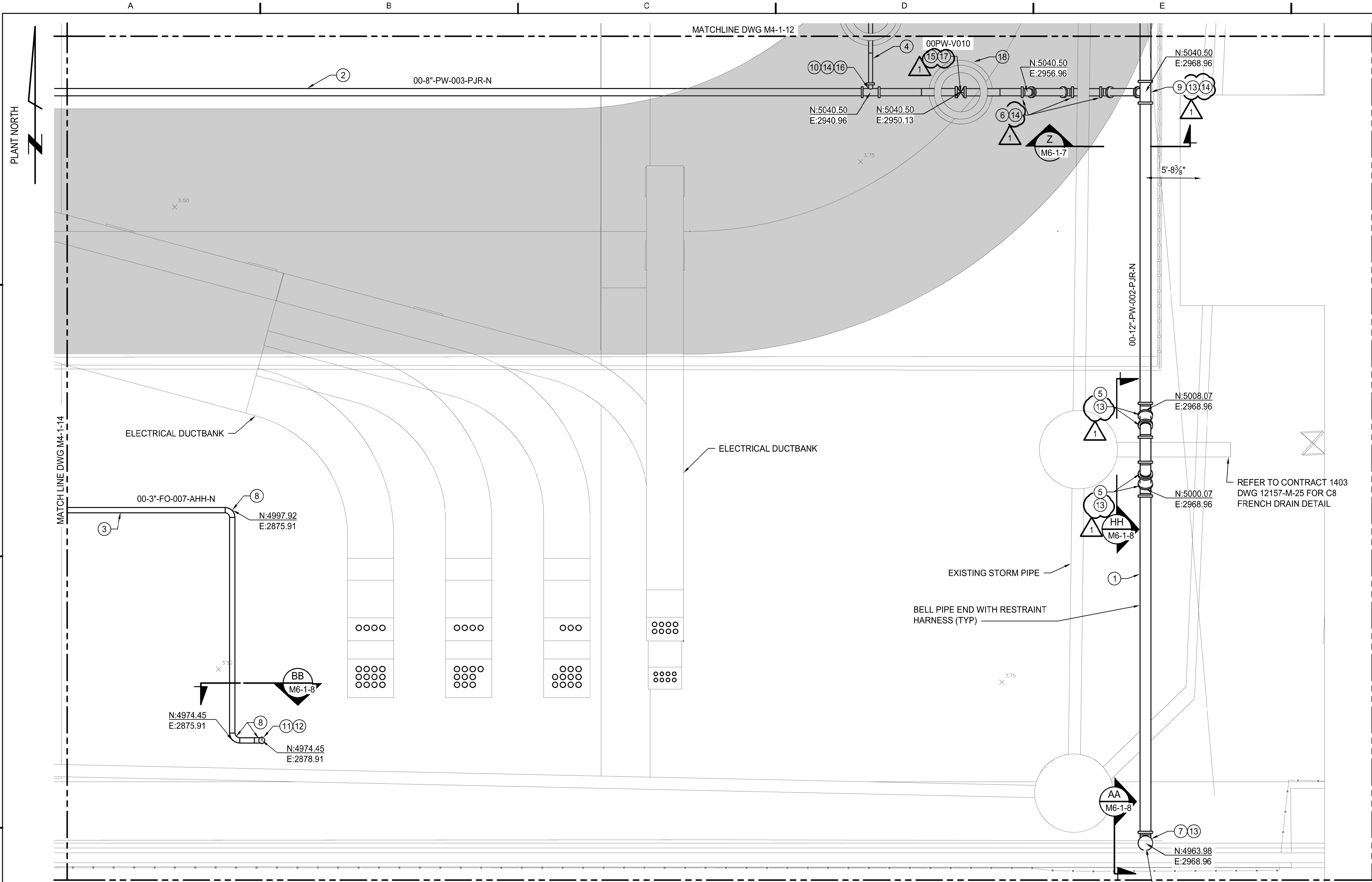


DATE: 5/27/22 JOB NO.: 174602
DESIGNED BY: M. STALLINGS
FILE NAME: M4-1-13.dwg

0 2 4 8 12 FEET
3/16" = 1'-0"

1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY
SEWERAGE AND WATER BOARD OF NEW ORLEANS			
CONTRACT No. 1415 CARROLLTON WATER PURIFICATION PLANT WPC FOUNDATIONS AND UNDERGROUND PACKAGE			
MECHANICAL UNDERGROUND PIPING PLAN			
DR:	C. PARRISH	A/E DWG NO.	M4-1-13
CK:	T. KUTLOWSKI		
AP:	M. STALLINGS		
LAST EDIT:			
SCALE:	3/16"=1'-0"	DWG. No.	12182-W25
DATE:	5/27/22	SET NO.	OF
		1/20/2023	9:21:57 AM

BID PACKAGE - NOT FOR CONSTRUCTION



LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	8
3	PIPE, DOUBLE WALL PIPING WITH LEAK DETECTION, MATERIAL SPEC YHD	6
4	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	4
5	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	12
6	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	8
7	90° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS CEMENT-MORTAR LINED, AWWA C110	12
8	90° ELBOW, DOUBLE WALL PIPING WITH LEAK DETECTION	6
9	TEE, REDUCING MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 8
10	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	8 x 4
11	FLANGE, DOUBLE WALL CONTAINMENT PIPING	6
12	BLIND FLANGE, DOUBLE WALL CONTAINMENT PIPING	6
13	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
14	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	8
15	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	8
16	RESTRAINED JOINT, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	4
17	VALVE, SEE S&WB DWG. 11897-W-62	8
18	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	

- NOTES:**
1. PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 2. ALL MECHANICAL JOINTS NEED RESTRAINTS.
 3. ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 4. ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
 5. PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 6. FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS PER S&WB DWG NO. 6179-F-2.
 7. FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.
 8. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES AND MAKING MODIFICATIONS TO ROUTING AS NECESSARY.


1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY

SEWERAGE AND WATER BOARD
OF NEW ORLEANS

CONTRACT No. 1415
CARROLLTON WATER PURIFICATION PLANT
WPC FOUNDATIONS AND UNDERGROUND PACKAGE

MECHANICAL
UNDERGROUND PIPING PLAN

DR.	C. PARRISH	A/E DWG NO.	
CK.	T. KUTLOWSKI		M4-1-15
AP.	M. STALLINGS		
LAST EDIT:			
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	1/20/2023	SHEET NO.	OF
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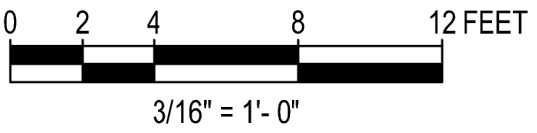


POWER ENGINEERS
Power Engineers Inc. - Louisiana State
Certificate of Registration # EP2455

DATE	5/27/22	JOB NO.	174632
DESIGNED BY:	M. STALLINGS		
FILE NAME:	M4-1-15.dwg		



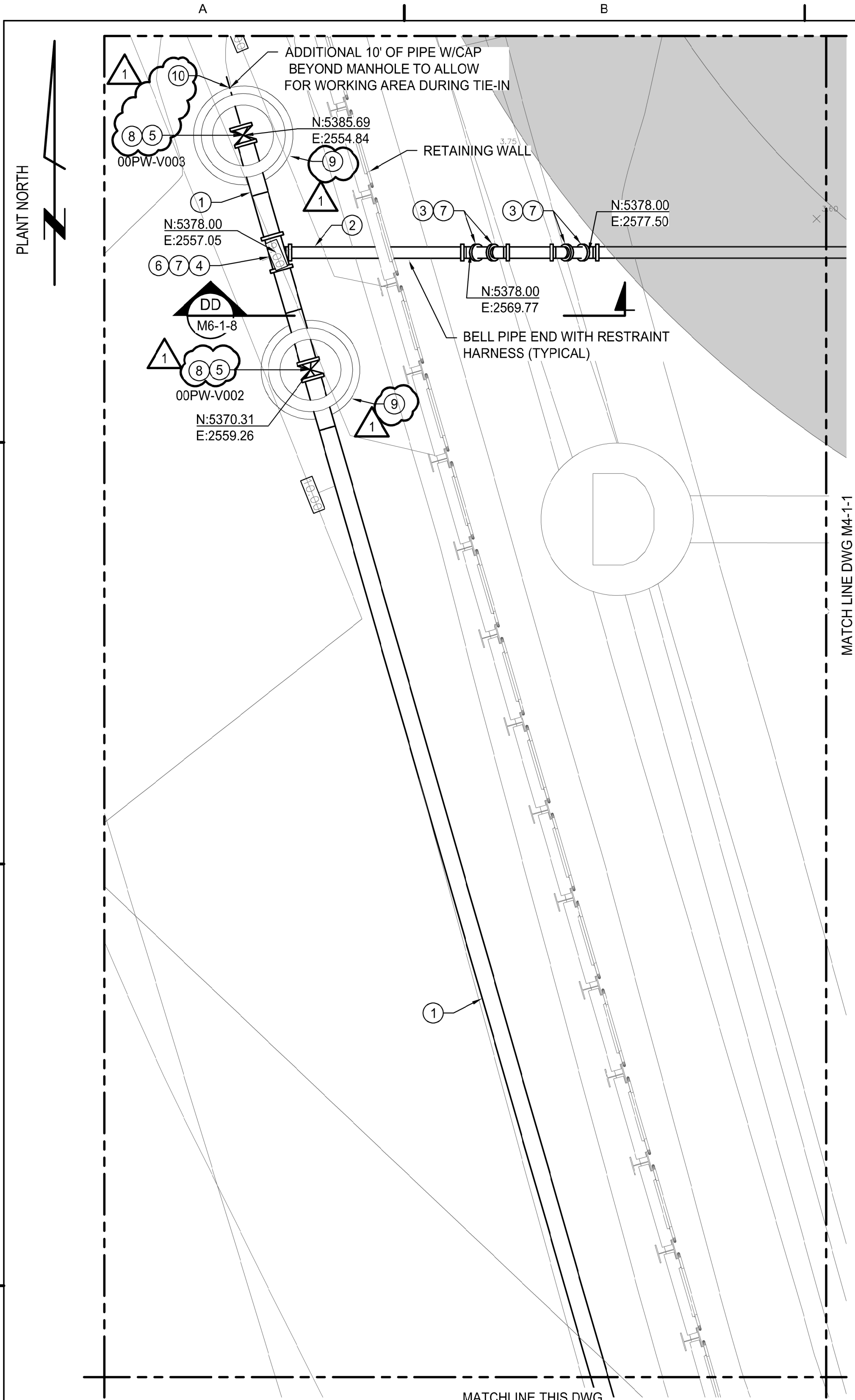
ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647



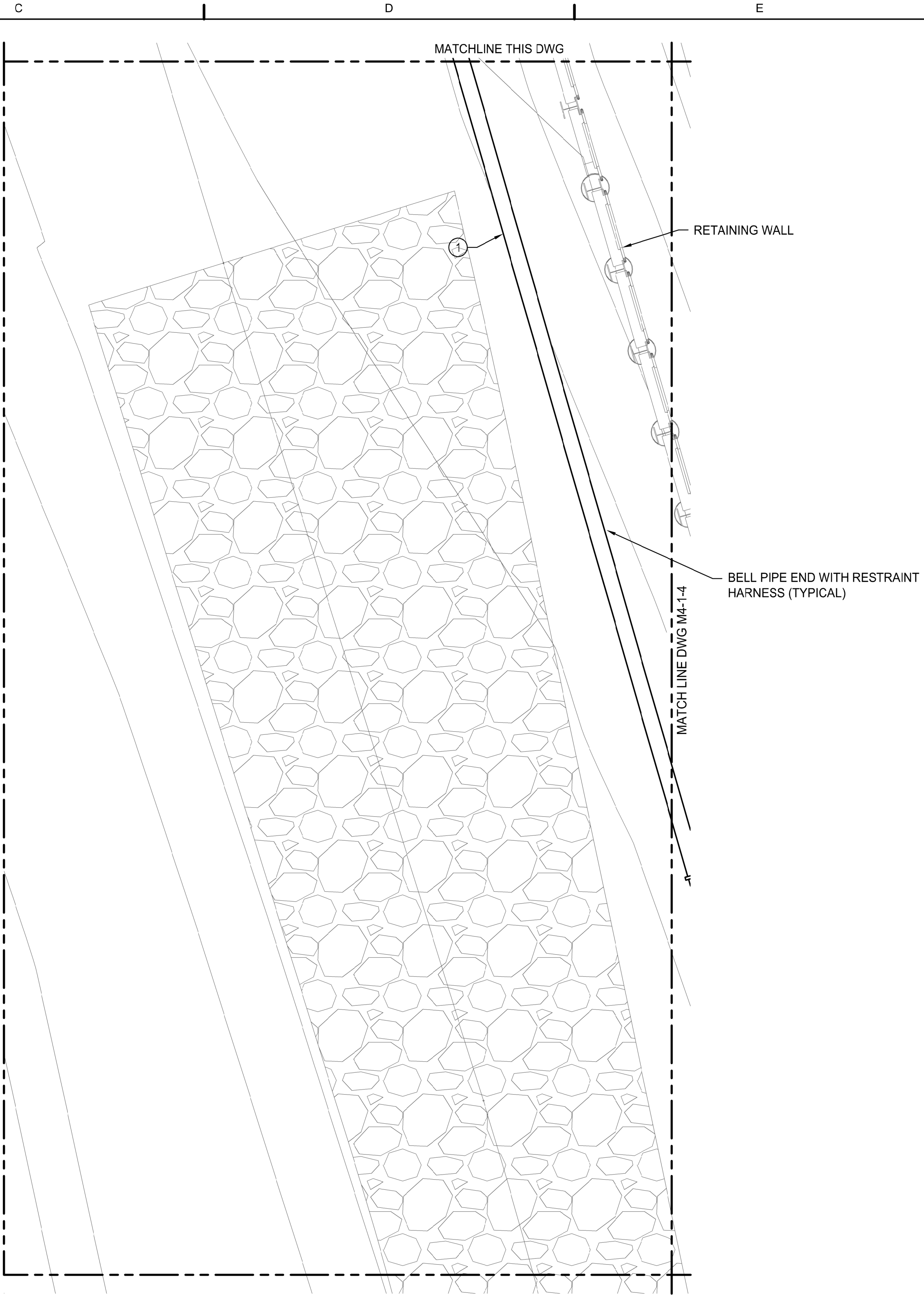
UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"

- NOTES (CONTINUED):**
9. WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
 10. CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING AND FITTINGS UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
 11. CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6". 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

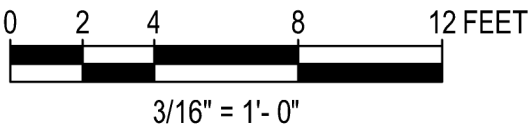
BID PACKAGE - NOT FOR CONSTRUCTION



UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"



UNDERGROUND PIPING PLAN
SCALE: 3/16"=1'-0"




LEGEND		
ITEM #	DESCRIPTION	NPD (IN)
1	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	12
2	PIPE, BELL & SPIGOT, PVC AWWA C900, 235 PSI (DR 18)	8
3	45° ELBOW, MECHANICAL JOINT, DUCTILE-IRON FITTINGS, AWWA C110, 350 PSI	8
4	TEE REDUCING, MECHANICAL JOINT, DUCTILE-IRON FITTINGS AWWA C110, 350 PSI	12 x 8
5	VALVE, SEE S&WB DWG. 11897-W-62	12
6	RESTRAINED JOINTS, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	12
7	RESTRAINED JOINTS, PVC, MEGALUG 2000PV OR APPROVED EQUIVALENT	8
8	RESTRAINED JOINT, DUCTILE IRON, TR FLEX OR APPROVED EQUIVALENT	12
9	WATER VALVE MANHOLE, PER S&WB DWG NO. 6179-F-2	
10	CAP, AWWA C110 DI FITTINGS, MJ, 350 PSI	12

- NOTES:**
- PIPING SHALL MEET PIPE MATERIAL SPECIFICATIONS NOTED AHH, EJC, EJS, PJR, AND YHD.
 - ALL MECHANICAL JOINTS NEED RESTRAINTS.
 - ALL PIPING COMPONENTS SHALL BE SUITABLE FOR FIRE WATER SERVICE AND POTABLE WATER SERVICE. COMPONENTS SHALL BE UL LISTED AND FM APPROVED.
 - ALL WATER IS POTABLE WATER AND PIPING SHALL BE PER S&WB GENERAL SPECIFICATIONS SECTION C741 AND DRAWING 7260.
 - PIPING COMPONENTS AND FITTINGS ARE SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, COMPONENTS, AND ACCESSORIES TO COMPLETE NEW PIPING SYSTEMS NOTED IN SPECIFICATIONS, DRAWINGS, AND PIPING MATERIAL SPECIFICATIONS.
 - FOR HYDRANT, VALVE BOX, AND VALVE MANHOLE DETAILS PER S&WB DWG NO. 6179-F-2.
 - FOR TESTING, FLUSHING, AND CHLORINATION DETAILS SEE S&WB DWG. NO. 7004-W.
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 - WATER MAIN OFFSETS IN THE NEW MAIN THAT ARE INDICATED ON THE DRAWINGS ARE CONSIDERED MAIN LINE FITTINGS AND PAYMENT IS INCLUDED IN THE PRICE OF THE NEW WATER MAIN. WATER MAIN LINE OFFSETS NOT INDICATED ON THE DRAWINGS ARE TO BE PAID AT THE BID PRICE FOR WATER LINE OFFSETS.
 - CATHODIC PROTECTION SHALL BE APPLIED TO METAL PIPING AND FITTINGS UNDERGROUND EXCEPT THE DOUBLE CONTAINMENT PIPING FOR FUEL OIL. CATHODIC PROTECTION SHOULD BE DESIGNED ACCORDING TO SECTION 485090 CATHODIC PROTECTION.
 - CONTRACTOR TO VERIFY FINAL GRADE. 8" AND SMALLER PIPING TO BE 3'-6" BELOW FINAL GRADE. IN SOME OFFSETS DUCTILE IRON PIPING WILL BE USED OVER DUCTBANKS OR EXISTING INFRASTRUCTURE AND COVER REQUIREMENT CAN BE REDUCED TO 2'-6" . 12" PIPING AND GREATER SHALL BE 4' BELOW FINAL GRADE.

1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY



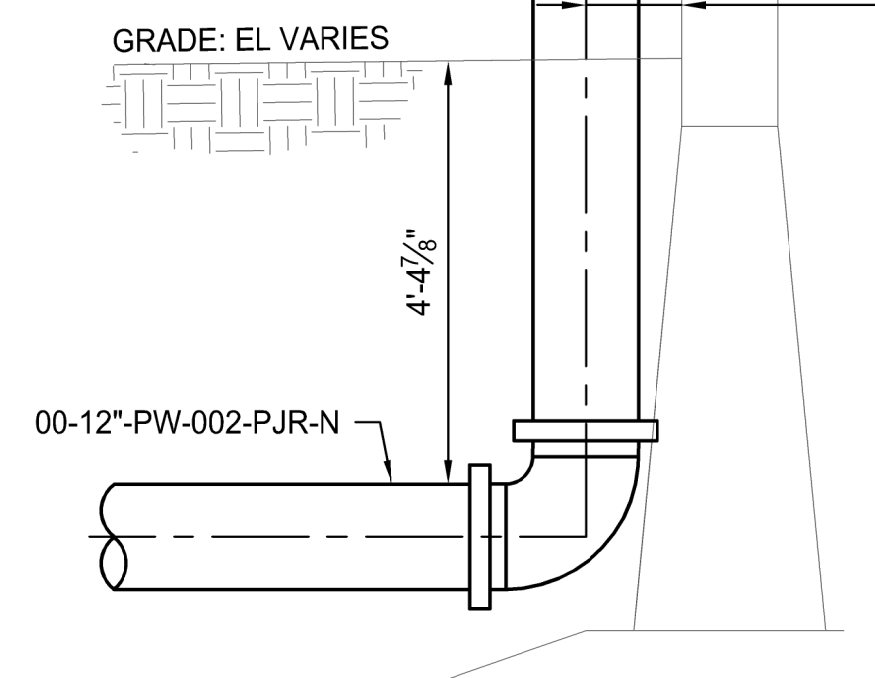
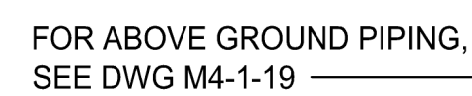
ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647

 POWER ENGINEERS <small>Power Engineers Inc. - Louisiana State Certificate of Registration # EP2455</small>			
DATE	5/27/22	JOB NO.	174602
DESIGNED BY:	M. STALLINGS		
FILE NAME:	M4-1-17.dwg		

DR.	C. PARRISH	A/E DWG NO.	
CK.	T. KUTLOWSKI		M4-1-17
AP.	M. STALLINGS		
LAST EDIT:			
SCALE:	3/16"=1'-0"		
DATE:	5/27/22	SET NO.	
		SHEET NO.	OF

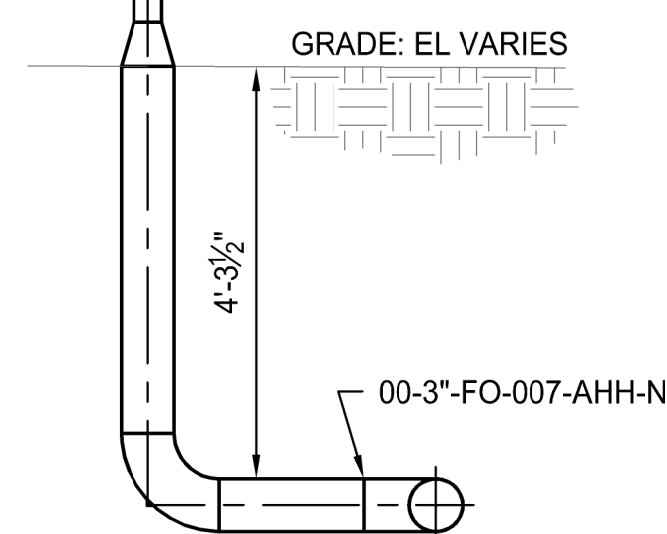
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BID PACKAGE - NOT FOR CONSTRUCTION



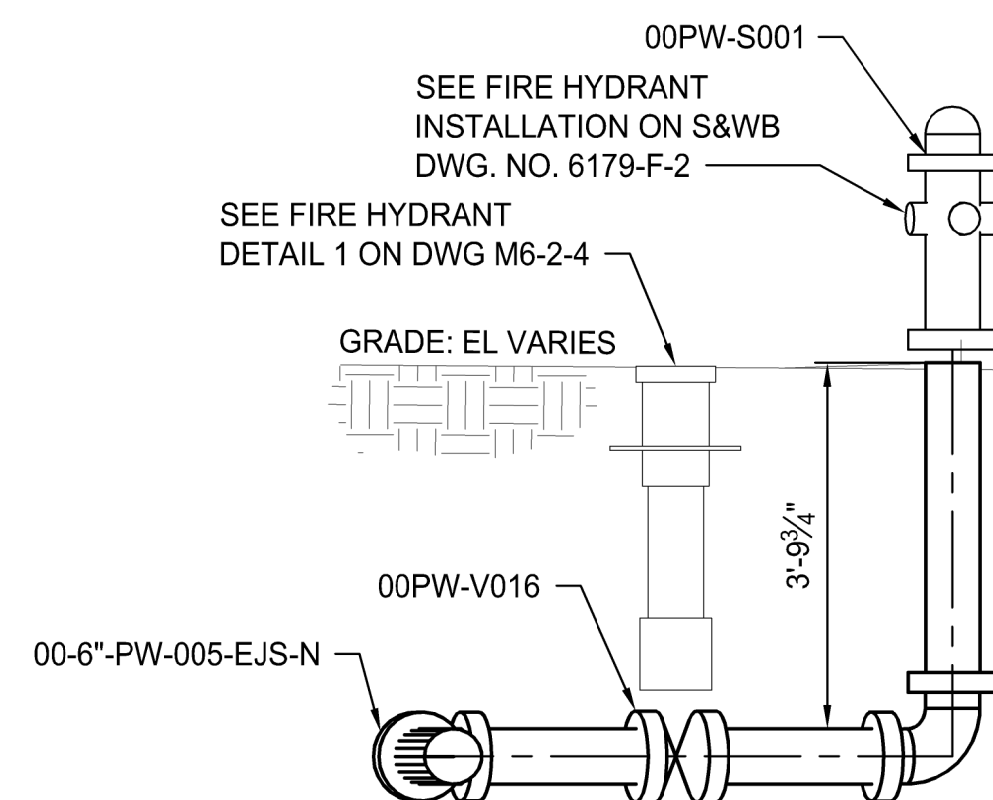
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SECTION

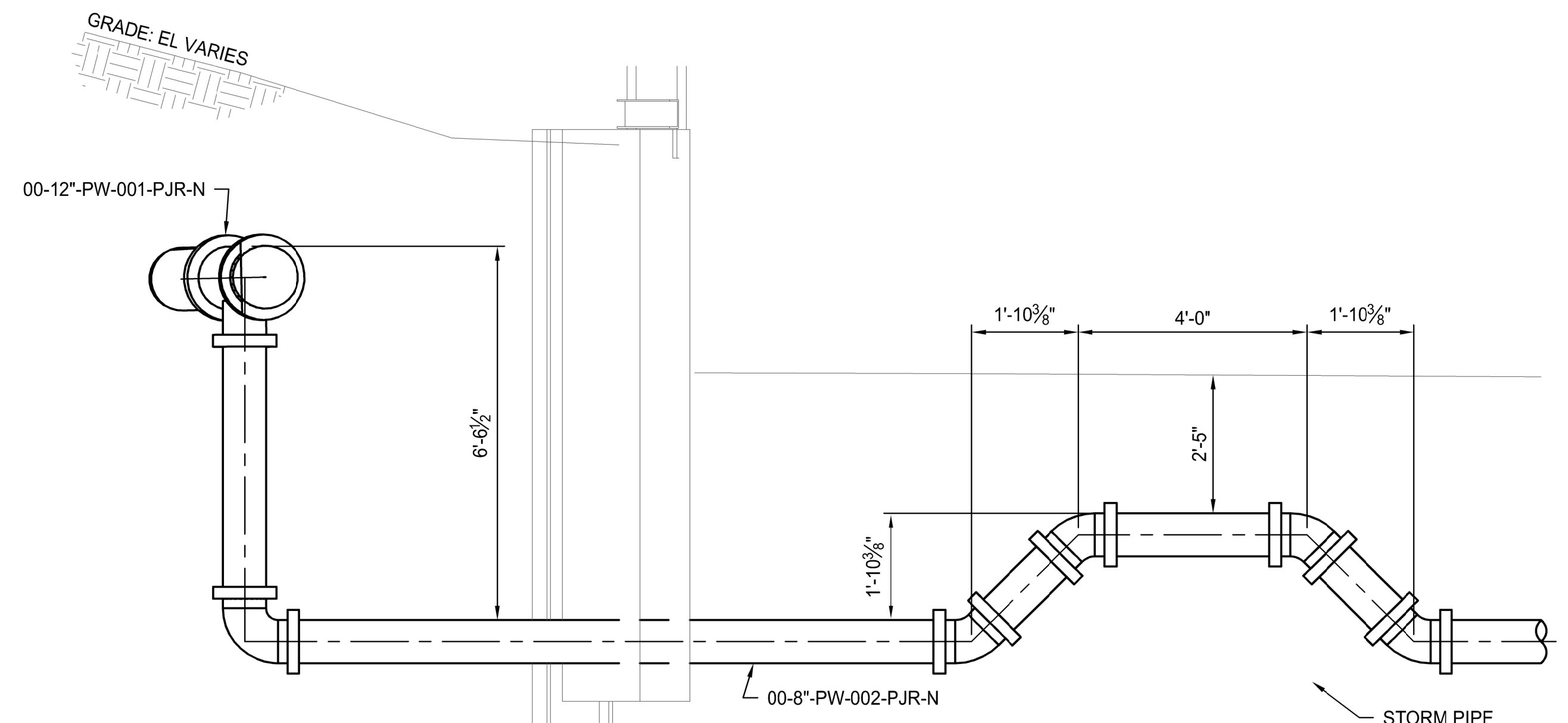
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SECTION

SCALE: 1/2"=1'-0"

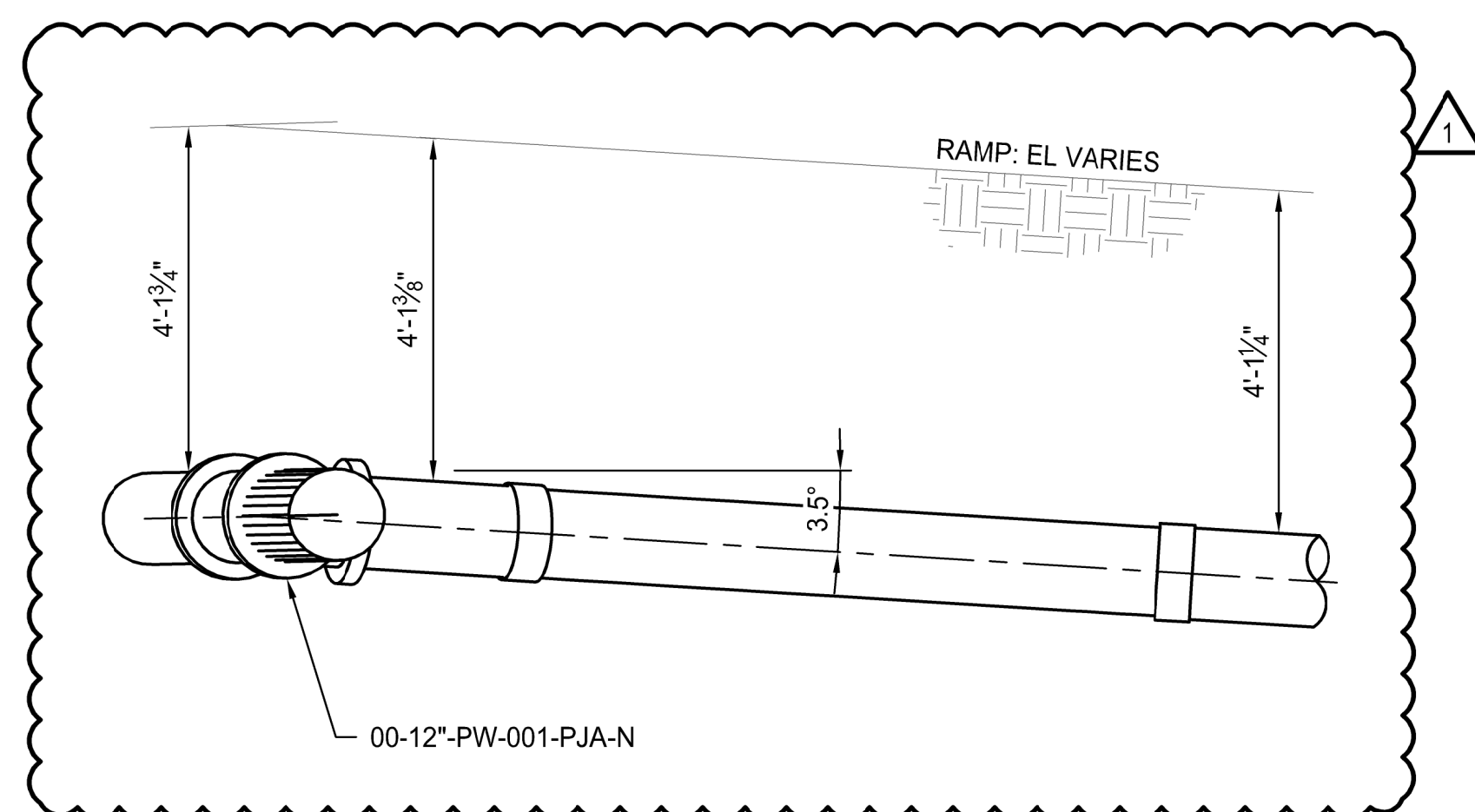
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M4-1-16



SECTION

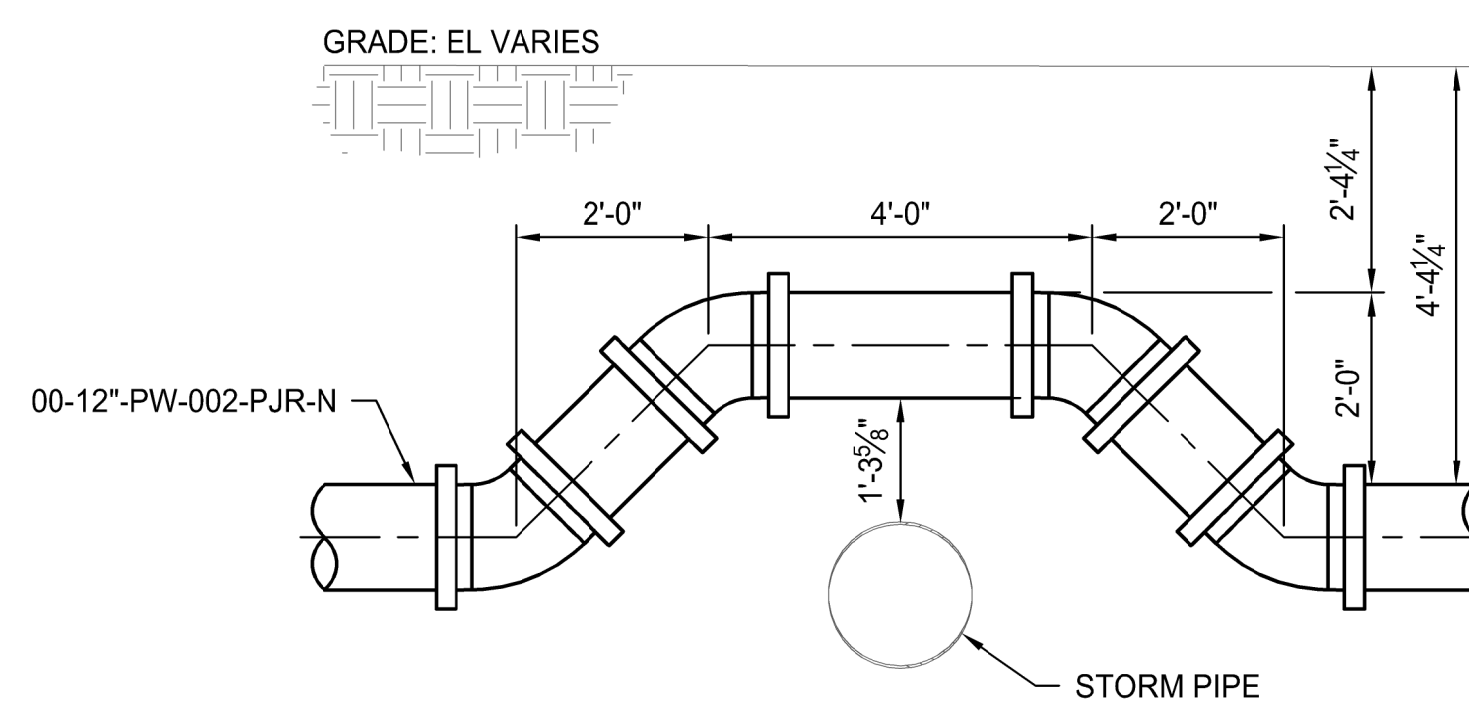
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DD
M4-1-17



SECTION

SCALE: 1/2"=1'-0"



SECTION

SCALE: 1/2"=1'-0"



- NOTES:

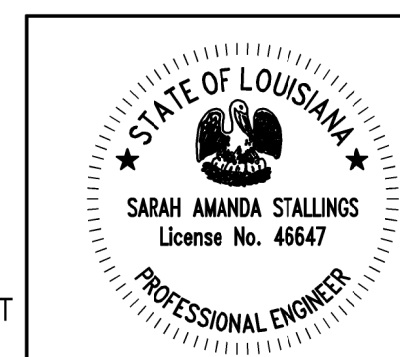
1. GRADE VALUES SHOWN ARE ESTIMATES.
2. LOCATIONS OF EXISTING UTILITIES AND STRUCTURES SHOWN ARE BASED ON AVAILABLE DRAWINGS. CONTRACTOR TO FIELD VERIFY.
3. SEE S&WB DWG NO. 6179-F-2 FOR HYDRANT DETAILS.

1	01/20/23	ISSUED FOR BID	MS
0	12/02/22	ISSUED FOR BID	MS
REV.	DATE	DESCRIPTION	BY

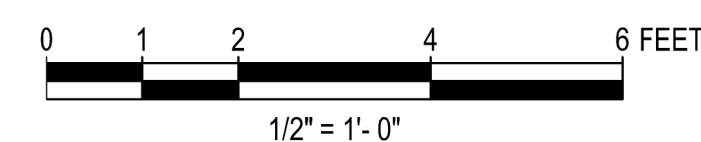
SEWERAGE AND WATER BOARD
OF NEW ORLEANS

CONTRACT No. 1415
CARROLLTON WATER PURIFICATION PLANT
WPC FOUNDATIONS AND UNDERGROUND PACKAGE

MECHANICAL UNDERGROUND PIPING SECTIONS



ENGINEER: MANDY STALLINGS
LICENSE #: PE # 0046647



Power Engineers Inc. - Louisiana State Certificate of Registration # EF2455			
DATE	5/27/22	JOB NO.	174602
DESIGNED BY: M. STALLINGS			
FILE NAME: M6-1-8.dwg			

DR.	C. PARRISH
CK:	T. KUTLOWSKI
AP:	M. STALLINGS
LAST EDIT:	
SCALE:	1/2"=1'-0"
DATE:	5/27/22

AE DWG NO.

M6-1-8

DWG. No.

12182-W25

DATE:	5/27/22
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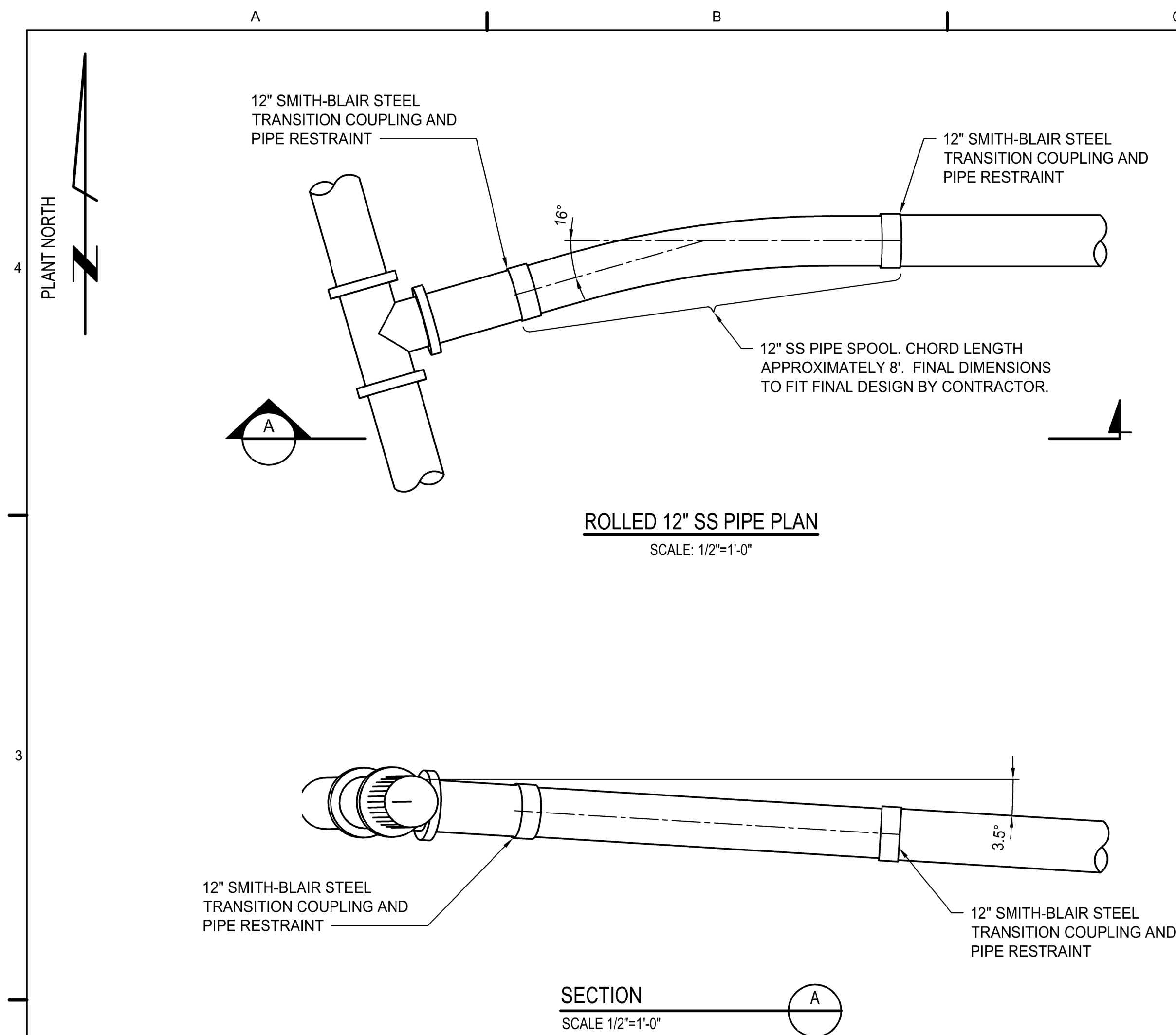
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SHEET NO: OF

1/19/2023

5:13:43 PM

BID PACKAGE - NOT FOR CONSTRUCTION



TAG	00PW-S010								
FEATURE(S)	SPECIALTY: SPECIALLY DESIGNED COMPONENT, PIPE, SS 316, NPS 12, SCH 10S, UNDERGROUND								
DESIGN PRESS. (PSIG)	150	150							
DESIGN TEMP. (°F)	-20 to 100	180							
DESIGN CODE(S)	ASME B31.1 – NON-BOILER EXTERNAL PIPING (2009) ASME B31.3 – NORMAL FLUID SERVICE PIPING (2008) ASME B31.9 – BUILDING SERVICES PIPING (2008)								
FLUID SERVICE	General Service: Water, Firewater								
USE	Stainless Steel Spool, rolled to connect PVC distribution piping underground.								
DESCRIPTION	This component consists of an approximately 8 ft section of SS 316 piping rolled to a 16 degree bend. This length does not include the extra length required for the bend. The pipe is buried underground and is connected to a PVC water main at both ends. A coupling piece and required restraints shall be included to provide the transition between PVC and steel piping.								
SPECIALTY STANDARDS	NSF 61 – Drinking Water System Components								
END TO END DIMENSION	Contractor to determine with final piping design.								
SIZE	NPS 12								
PRIMARY JOINT TYPE	Mechanical Joint								
PRESSURE CLASS	CL 150								
PIPE MATERIAL	ASTM A312 Gr. TP316, SMLS, ASME B36.19M Sch. 10S BE								
FITTINGS									
COUPLINGS	Smith Blair Steel Transition Coupling 413 With Pipe Restraints								

- #### **ADDITIONAL REQUIREMENTS**
1. Need for cathodic protection to be evaluated according to Section 485090 – Cathodic Protection.
 2. Certify all components and joints to NSF 61 – Drinking Water System Components.
 3. All welds of stainless steel shall be Tungsten Inert Gas (TIG) welds made using an arc welding process.
 4. All welds shall be inspected and certified by a Certified Welding Inspector (CWI), per Section 050523 – Welding and Section 485868 – Welding Power Plant Piping.
 5. Pipe fabricator to confirm final wall thickness on piping bends does not violate minimum wall thickness. Pipe bending shall comply with ASME B31.1 and Pipe Fabricators Institute (PFI) ES-24. Wall thickness reduction during bending may utilize excess material available from manufacturers nominal wall tolerance. Where required, pipe fabricator to provide thicker pipe spool section to allow for wall thickness reduction during bending.

0	01/20/23	ISSUED FOR BID			MS
REV.	DATE	DESCRIPTION			BY
<p align="center">SEWERAGE AND WATER BOARD OF NEW ORLEANS</p> <p align="center"><u>CONTRACT No. 1415</u></p> <p align="center">CARROLLTON WATER PURIFICATION PLANT WPC FOUNDATIONS AND UNDERGROUND PACKAGE</p> <p align="center">MECHANICAL</p> <p align="center">SPECIALTY PIPING DETAIL</p>					
DR.	C. PARRISH	<div style="display: flex; justify-content: space-between; align-items: center;"> <div>A/E DWG NO.</div> <div>M6-2-1</div> </div>			
CK.	M.STALLINGS				
AP.	M. STALLINGS				
LAST EDIT:					
SCALE:	1/2"=1'-0"	<div style="display: flex; justify-content: space-between; align-items: center;"> <div>DWG. No.</div> <div>12182-W25</div> </div>			
DATE:	01/06/23				
SET NO:		SHEET NO:		OF	